# A PROPOSAL FOR THE INTERPRETATION OF JOHN BARTRAM'S GARDEN

BY

Paul W. Meyer

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Science in Ornamental Horticulture.

June, 1977

RETURN TO:

DR. RICHARD W. LIGHTY

COORDINATOR

LONGWOOD PROGRAM

UNIVERSITY OF DELAWARE NEWARK, DELAWARE 19711

INSURED FOR: \$50.00

# A PROPOSAL FOR THE INTERPRETATION OF JOHN BARTRAM'S GARDEN

BY

Paul W. Meyer

Anı	proved:	
<u>-</u> -		

Dr. Richard W. Lighty
Professor in charge of thesis on behalf of
the Advisory Committee and Coordinator of
the Longwood Program in Ornamental Horticulture

Approved:

Dean of the College of Graduate Studies

#### ACKNOWLEDGMENTS

The author would like to thank the Longwood Program in Ornamental Horticulture for the graduate fellowship which has made the preparation of this thesis possible. I am especially grateful to Dr. Edward Alexander, Dr. Richard Lighty, and Dr. Russell Seibert, whose guidance and criticisms have improved this work. I would also like to thank the John Bartram Association, particularly Mrs. Henry Evans and Ms. Carol Lynch, for their cheerful cooperation and encouragement.

# TABLE OF CONTENTS

ABSTRACT i	v
INTRODUCTION	1
CHAPTER	
	7
CONCLUSION	6
FOOTNOTES	7
BIBLIOGRAPHY 4	1
APPENDICES	
II. ANNOTATED PLANT LIST 4	46

#### ABSTRACT

John Bartram (1699-1777) was one of Colonial
America's foremost botanists and plant explorers. Collecting plants throughout eastern North America, he was responsible for the introduction of between 150 and 200 new American species to England. Today, his house and garden, located on the Schuylkill River several miles southwest of Center City Philadelphia, are operated as part of the Fairmount Park System. In recent years, however, Bartram's Garden has served as little more than a city park, distinguished only by its historic house and relatively diverse plant collection.

For John Bartram this site was a permanent botanic garden where he maintained his personal plant collection. His everyday work was farming, but the garden fulfilled his avocational dream and also provided him with a nearby source of propagation material. Moreover, it was a way station where species collected in the wild were planted, observed, and propagated before being disseminated throughout the world. In this garden Bartram devised and experimented with his own horticultural techniques as well as those recommended to him by others. Many of these methods are still used today and should be interpreted for modern gardeners, thereby

relating the experiences of John Bartram to those of the horticulturally aware visitor. Through the development of the plant collection and horticultural exhibits, the story of John Bartram can come alive and have relevance for visitors to his garden.

#### INTRODUCTION

JOHN BARTRAM: HIS LIFE, HORTICULTURE, AND GARDEN

On the west bank of the Schuylkill River several miles south-west of Center City Philadelphia lies Bartram's Garden, a green oasis amid dense industrial development and urban housing. Bartram's Garden, administered by the Fairmount Park Commission in conjunction with the John Bartram Association, is more than just a city park. Its history dates back to 1670, when Hans Monson, a Swede, secured a patent to a 100-acre tract of land on the Schuylkill. A resurvey of the property in 1675 showed that the tract actually contained 1100 acres. 1

In 1681 Monson sold the property which was subsequently subdivided and resold.<sup>2</sup> By the late 1720's the land now Bartram's Garden was in the hands of Frederick Schopenhausen. He apparently fell into debt and his 102-acre tract with its house was confiscated for sheriff's sale. On September 30, 1728, Bartram purchased this property which was to be the nucleus of his farm and garden.<sup>3</sup>

John Bartram, born in 1699 of immigrant Quaker parents, was a farmer all of his life. Instinctively inquisitive in many areas, he cultivated an avocation in

botany. His knowledge of plants' medicinal properties was often utilized when he treated sick neighbors who were unable to visit a physician in Philadelphia. To further this interest he obtained botany books, then written in Latin, from friends in Philadelphia. Since Bartram's education was meager, he hired the local schoolmaster to teach him Latin. By the late 1720's, he was botanizing throughout the surrounding countryside whenever he could free himself from farming.4

Sometime before 1732, Bartram became friendly with Joseph Breintnall, a Philadelphia merchant. Breintnall, a member of Benjamin Franklin's Junto, was well connected with the Philadelphia intellectual community. He also had dealings with Peter Collinson, a wealthy London cloth merchant and a good Quaker, keenly interested in botany. Particularly desirous to obtain native American plants, Collinson frequently requested Breintnall's assistance in obtaining them. Though Breintnall was able to send a few seeds and roots, it was not enough to satisfy Collinson's enthusiasm. In 1732 Breintnall referred Collinson to his friend John Bartram, suggesting that they could work out a satisfactory agreement.

The result was a lively correspondence and trade which were to last for more than thirty-eight years. When-ever he could take time from his work, Bartram went out into the wilds collecting plants, seeds, and roots to bring back to his garden which he established between his house and the

river. He added novel specimens to his own collection and sent boxes of surplus plant materials to Collinson for the price of five to ten guineas per box. In England, word of Bartram's collections quickly spread, and soon Collinson was acting as agent for other patrons including Philip Miller, who wrote the popular <u>Gardeners Dictionary</u>, Sir Hans Sloane, whose collections were used in founding the British Museum, and Lord Petre, a noted plant collector.

To satisfy his correspondents Bartram soon began taking longer trips. In 1735 he followed the Schuylkill River to its source. He subsequently extended his trips to Maryland, New Jersey, New York, New England, Virginia, and later south to the Carolinas, Georgia, and Florida. Since most of his botanical journeys were barely self-supporting, he still maintained his farm as his principal means of support. Thus, most of his trips were taken after the crops were harvested in the autumn, also the ideal time for collecting most plants and seeds. In 1763 Collinson expressed his appreciation for these efforts when he wrote: "All botanists will join with me in thanking dear John for his unwearied pains to gratify every inquisitive genius."

Over the years Bartram built up a large following in Europe. These included Sir Hans Sloane, Philip Miller, Dr. John Fothergill, a wealthy London physician and plantsman, Queen Ulrica of Sweden, and Peter Kalm, the Swedish plant explorer and student of Linnaeus. In North America Bartram

became the "botanical central," corresponding and exchanging visits with botanists and horticulturists throughout the colonies. Bartram's career reached a peak in 1765 when Peter Collinson wrote him:

I have the pleasure to inform my good friend that my repeated solicitations have not been in vain for this day I received certain intellegence from our gracious King [George III] that he hath appointed thee his botanist with a salary of fifty pounds a year. • •

Bartram's garden on the Schuylkill was the hub of all this activity. Here he cultivated and observed the novel plants he collected in the wilds. Here he experimented with propagation techniques to increase the supply of plants so that all his patrons could be satisfied. Here he applied the latest horticultural theories of his time, acquired through personal observation, his readings, and correspondence. During Bartram's lifetime travelers from all over the world with interest in the natural sciences visited his garden to see his curiosities and hear his witty botanical observations. After meeting Bartram in 1738, Colonel John Custis of Virginia observed: "He is the most facetious man I have ever met with and never was so much delighted with a stranger in all my life."

Bartram did more than anyone else in the eighteenth century to enrich European gardens with American plants.

Until 1734, the year Bartram sent his first shipment to Peter Collinson, only 300 American species had been introduced

into English gardens. From this date until the beginning of the American Revolution, the period of Bartram's active career, about 320 additional species were introduced. Of these, the English records credit Collinson for the introduction of 40 species, most of which probably came from Bartram. Nearly 200 species are credited to Philip Miller, who rarely named the original collector of his North American introductions. As early as 1736, Miller was a regular contributor to Bartram subscriptions and received from Collinson his share of each shipment. In 1758 Miller wrote Bartram:

The specimens you was so good as to send me by Capt. Lyon would have been a treasure had they arrived safe but his ship was taken by the French so those are all lost which is a great misfortune at this time when they would have been a great service to me in ascertaining the names of some plants which remain doubtful. . ."10

It is safe to assume that a large portion of the plants credited to Miller as introducer actually came from Bartram. He probably was responsible for the introduction of between 150 and 200 new American species into England. 11

Each year Bartram also sent large quantities of seeds from species previously in cultivation but only in limited quantities. Thus, plants considered rare were made available to many British gardens. "Indeed, his influence in increasing the abundance of American plants in cultivation might be regarded as of importance equal to that of his introduction of novelties."

After Bartram's death in 1777, his house and garden were inherited by John Bartram Jr., who in turn willed that section of Bartram property to his daughter, Mrs. Ann Carr, in 1814. <sup>13</sup> In April of 1850, Robert and Ann Carr sold the house and garden to Andrew Eastwick. After Eastwick's death in 1879, the land was administered by the Pennsylvania Company for Insurance, which in 1893 sold the tract to the City of Philadelphia. With the purchase of sixteen additional acres in 1897, the city completed acquisition of the land which now comprises Bartram Park. <sup>14</sup>

The descendants of John Bartram formed an association to help care for the property in 1893 and enlarged the membership in 1924 to include the interested public. 15

Since that time, despite several attempts to restore the garden, the level of interpretation has remained low. In recent years the property has been little more than a public park, distinguished only by the historic house and a relatively diverse collection of trees and shrubs. In order to insure the public support needed to secure the future of Bartram's Garden, its functions must be clearly defined and developed.

#### CHAPTER I

#### INTERPRETIVE PROSPECTUS

## Theme

The interpretive theme of Bartram's Garden should encompass both the story of John Bartram, plant explorer and horticulturist, and the relationship of his eighteenthcentury work to twentieth-century horticulture. To Bartram this site was a permanent botanic garden where he maintained his personal plant collection. Not only did the garden fulfill his avocational dream but it also provided him with a nearby source of propagation material. Moreover, it was a nursery and way-station where species collected in the wild were planted, observed, and propagated before being disseminated throughout the world. Exotic plants from Bartram's overseas correspondents were likewise received here before being distributed throughout the colonies. In this garden Bartram devised and experimented with his own horticultural techniques as well as those recommended to him by others. Many of these methods are still useful today and should be interpreted in that light, thereby relating the experiences of John Bartram to those of the horticulturally aware visitor.

Since Bartram's Garden is primarily a historic botanic garden, the theoretical objectives of botanic gardens in general provide a logical framework in which to establish its purposes. Thus, planning for Bartram's garden should include the following general functions:

- 1. Botanical Collection
- 2. Passive Recreation
- 3. Interpretive Demonstration
- 4. Research
- 5. Plant Introduction
- 6. Horticultural Information Center
- 7. Professional Training

## Botanical Collection

Bartram's Garden should contain a teaching collection of plants which relate to the interpretive themes of the garden. Because of spatial limitations, however, it is not possible to accommodate every species that Bartram grew. In a letter to "Dr. Sibthorp professor at Oxford" Bartram states:

. . . I am better stocked with materials than formerly haveing now searched our North America from New England to near Georgia and from ye sea coast to Lake Ontario and many branches of ye Ohio so that now there is but few plants in all that space of ground but what I have observed nay have most of them growing in my own garden. 1

Though this statement may have been somewhat exaggerated, Bartram undoubtedly had an extensive collection of native American plants. Furthermore, his correspondents were always eager to contribute to his collection of exotics in hopes of gaining his favor. In a letter dated July 16, 1761, John de Ponthieu, a London plantsman, makes the following offer to John Bartram:

We are sorry to hear by your favour of the 26th of May that your intended present was taken by the French we are however not the less obliged to you, and kindly thank you We heartily wish we knew what plants of this country's growth would be agreeable to you we shou'd send them immediately as likewise those from Italy, Spain, Portugal & a very great variety we have from the Alps some of which we believe would please you very much, as nobody in England has them but ourselves.

We keep a general correspondence all over the world & can assure you that nothing will give us greater pleasure than to accomodate you. We believe your best way will be to send us an account of all the European plants you have & then we shall see what you want, and send them by first oppertunity.<sup>2</sup>

From such offers from Bartram's correspondents, it is seen that many plants grown in Europe at that time could have been grown by Bartram. Thus, it is necessary to set specific criteria for plant selection today at Bartram's Garden.

All species planted at Bartram's Garden should be historically appropriate, that is, known to John Bartram or growing in his garden before 1783. The year 1783 is chosen because it was the publication date of the <u>Broadside Catalogue</u>, an important source of information on plants then growing in the garden. Since the catalogue appeared only

seven years after John Bartram's death, most plants in the garden would not have changed in that interval. Exceptions can be made for plants representative of those introduced to the garden by William Bartram after his father's death. Priority should certainly be given to American native plants as Bartram's most notable work was collecting them for subsequent introduction into Europe. A few exotics should be included, however, to represent that particular area of Bartram's activity. Finally, in addition to being appropriate, each species maintained in the garden should be outstanding in at least one of the three following categories:

- 1. Plants useful to colonists of Bartram's time are of particular value since they can be used in relating him to the social conditions of his time.
- 2. Species of particular horticultural or botanic interest to Bartram or his correspondents are important in interpreting the state of these sciences in the eighteenth century.
- 3. Species of outstanding ornamental merit, particularly those well suited to contemporary urban and suburban gardens, can serve to make Bartram's work relevant to today's visitor.

Besides being authentic, each species should serve to expose some facet of the John Bartram story to the garden

visitor. The plants, as primary interpretive materials of the garden, should be clearly identified with labels giving both their scientific and common names. For trees, the engraved laminated plastic labels supplied by the Fairmount Park Commission are recommended. These labels are inconspicuous, though easily read even when placed high on the trunks of trees out of the reach of potential vandals. For shrubs and very small trees, small metal embossed labels, available from the Morris Arboretum, are recommended. These are relatively inexpensive and can easily be replaced if lost.

Because of their high cost and vulnerability to vandals, story labels should be given low priority. Though these are an effective means of interpretation, resources can be better utilized by publishing a self-guided tour pamphlet which would be available to the visitor from the house guard at low cost. Plants and various points of interest throughout the garden could then be code-numbered with small plastic engraved labels which would correspond with numbers on the map and guide. In the guide each plant species or point of interest would be described in a concise, interesting, and informative manner. Priority should be given to the interpretation of those species which best fulfill the selection criteria previously listed, and the interpretation should stress those points which caused the species to be included in Bartram's Garden. In the future

as funds become available and visitation increases, metalphoto interpretive labels should be used to supplement the
pamphlet. By cooperating with other botanical institutions
in the area, production costs can be minimized.

## Passive Recreation

Bartram's Garden, located in a heavily populated industrial area, provides the only environment for passive recreation in its immediate vicinity. As such it is important that the garden remain freely open to the public. The area south of the historical garden has facilities for active recreation which should be forbidden in the garden.

Leaving the garden open as a walk-in park does present security problems. In the past some vandalism has occurred, most of it non-malicious in nature, which could be controlled with more low-key policing along with an expanded public education program. Queens Botanic Garden, in a similar urban area, has dealt with the vandalism problem by enlisting neighborhood goodwill and support. Neighbors concerned about the garden are far more effective in protecting the property than any formal security force.

Though a fence would provide security that would allow fine horticulture and elaborate outdoor museum exhibits, a fence is not recommended at present until evaluation of the present security situation can be made. A security fence, a negative aesthetic feature not in keeping with the historic

mood of the garden, would also not guarantee absolute immunity from vandalism.

As a passive recreational facility, the garden should be visually attractive to the general public, but an elaborately landscaped park would not be in keeping with the mood of the original historic garden. After visiting Bartram, Alexander Garden wrote:

His garden is a perfect portraiture of himself; here you meet a row of rare plants about covered over with weeds, here with a beautiful shrub, even luxuriant amongst the briars, and in another corner an elegant and lofty tree lost in a common thicket.4

George Washington remarked in 1787 that the garden, "tho stored with many curious plants, shrubs and trees and many of which are exotic, was not laid with much taste nor was it large." Similarly, the Reverend Manassah Cutler, in that same year commented that "everything is very badly arranged, for they are neither placed ornamentally nor botanically, but seem to be jumbled together in heaps." Bartram's level of maintenance was apparently very low, but it should be remembered that besides his botanical expeditions he was managing a profitable farm. Thus we can forgive him for allowing his lofty trees to be "lost in a common thicket."

Obviously, it is not desirable to restore the garden to a poorly maintained condition since few visitors would be interested in observing "a row of rare plants about covered over with weeds." On the other hand it is equally important to avoid the imposition of an elaborate design on the site.

William U. Massey, horticulturist for the National Trust for
Historic Preservation, offers a compromise for similar situations.

To offset the disadvantage of not being able to restore the original landscape, a well-preserved, though recent garden may be complemented by imaginative and informative exhibits, displays and literature. This approach avoids the pitfalls of a false sense of authenticity while enlarging the visitors' understanding and appreciation for the history of the garden.

Once the gardens are restored, an adequate maintenance program should be developed. The program should attempt to complement the historical period of the garden. For instance, a high maintenance program for a colonial garden will compromise the historical authenticity as much as does improper planting or improper design. 7

A sound compromise will insure both the proper maintenance of the valuable botanic collection and a pleasant aesthetic experience for the visitor. Again, moderation must be the rule. For example, if a shrub is overgrown, pruning to improve its appearance and vigor should be done in a naturalistic manner so that the operation is not apparent to the visitor. Not only is this a good horticultural practice, but it also contributes to the authentic mood of the garden. Maintaining the lawns presents a similar problem. Although mowing may be historically inappropriate, it is necessary to maintain the grassy areas at a manageable height. Once more several objectives must be compromised. Roughcutting the grass at a relatively high mower setting (two

and a half to three inches) will maintain it at a manageable height while still preserving the rustic mood.

## Interpretive Demonstration

A dynamic means of portraying the horticulture of John Bartram is through the use of living interpretive demonstration. This device will show Bartram's various horticultural practices and ideally they will be interpreted so the basic historic principles will be related to modern horticulture.

For example, in 1735 Peter Collinson gave Bartram specific instructions pertaining to the production of container-grown plants:

I wish at the proper season Thee would procure a strong box 2 feet square and about 15 or 18 inches deep but a foot deep in mould would be enough.

then collect half a dozen of Laurells and half a dozen shrub honesukles and plant in this box but be sure make the bottom of the box full of large holes and cover the holes with tiles or oyster shell to lett the water dreine better off then lett this box stand in a proper place in thy garden for two or three years till the plants have taken good root and made good shoots but thou must be carefull to water it in dry weather.8

This passage shows how Bartram probably grew many plants in preparing them for shipment to England. Collinson shares with Bartram his basic understanding of the need for organic matter, good aeration, and drainage in container plant culture. These basic cultural requirements are still relevant today and should be passed along to the garden

visitor who may be cultivating container plants in his house and garden.

Similar exhibits can deal with plant collection, herbarium specimen preparation, composting, plant propagation, mulching, and winter burn. These exhibits can relate the eighteenth-century methods to modern gardening techniques. In this way the story of John Bartram can be brought to life by making it relevant to the experiences and needs of the visitor.

#### Research

Research, an important function of many botanic gardens, should have a unique role at Bartram's Garden. The research should be based on historical precedent and related to the interpretation of the horticulture of John Bartram for the garden visitor. Topics could include the propagation of Bartram introductions, their hardiness and performance in various microclimates, composting, and the effects of mulching. Studies of the hardiness of Bartram's southern introductions in the Philadelphia area would interest professional horticulturists and be suitable for publication in professional journals. In previously explored areas the research could be reconducted mainly for its interpretive merit.

For instance, hardiness research on <u>Anisostichus</u>
<a href="mailto:capreolatus">capreolatus</a> (Cross Vine) would be of professional interest

as well as interpretive value. In 1763 Bartram observed:

ye bignonia folius conjugatis [Cross Vine] ran up ye no. east corner of my house last summer twenty feet high ye leaves and vine of which is now very green but one at ye southwest end is bare of leaves tho ye vine is green. 9

Today this planting could be replicated at Bartram's with observations recorded each year. After several years the observations could be published, and compared with those Bartram made in 1763. Planting recommendations could then be made based on the contemporary data. Such a publication would disseminate information about the Cross Vine and result in publicity for Bartram's Garden.

#### Plant Introduction

Plant introduction is another important function of botanic gardens. At Bartram's Garden this activity might be more appropriately called plant re-introduction. Unusual plants which Bartram is known to have collected should be grown, propagated, and evaluated in the garden. Where appropriate, superior individuals should be selected for vegetative propagation. The young plants should be grown in a nursery demonstration area. After they reach landscape size, some specimens should be added to the permanent collection while the others are distributed to interested nurserymen, botanic gardens, and other institutions.

Those plants that are of particular historic and ornamental interest should be described in popular

horticultural journals, including the historic background of the plant and recommendations for landscape use and cultural practices. Once again, such an article will not only serve to disseminate information, but also to increase public awareness of Bartram's Garden.

## Horticultural Information Center

Another important function of a botanic garden is to serve as a horticultural information center, providing information to the public on such topics as horticultural practices, pesticides, plant identification, and local growing conditions. Because of staff limitations and the availability of horticultural information from other sources in the Philadelphia area, this function should not be emphasized at Bartram's Garden.

It would be advantageous, however, to offer a limited neighborhood horticultural information service. Staffed by knowledgeable volunteers and publicized in the area immediately surrounding the garden, this service would be an ideal way to obtain neighborhood recognition and support which is essential for the success of the garden.

# Professional Training

The training of professionals is an important function of botanic gardens. At Bartram's Garden first priority should be given to horticultural and historical training for the Fairmount Park staff stationed there, in order to insure

the proper maintenance and interpretation of the collection. Areas of instruction should include basic pruning, planting, transplanting, along with disease and insect control. Much of this training should be informal, using experience under trained supervisors as the primary teaching technique. For example, if fireblight is observed in the Hawthorn (Crataegus sp.) collection, the Executive Secretary could alert the gardeners to this problem, explaining the life cycle and diagnosis of the disease and demonstrating the proper means of control so that the gardeners could diagnose and treat it on their own initiative as well as inform visitors about this problem.

Furthermore, the gardeners should be given a basic appreciation of the life and horticulture of John Bartram, since the visiting public often asks them for interpretive information. A staff education program will support the interpretive program, improve the level of maintenance, and enrich the gardeners' jobs.

The possibility of cooperating with neighboring universities in various internship and work-study programs should be fully explored. Often government and foundation grants will fund these programs, making the student workers available to the cooperating institution at little or no cost. A small institution like Bartram's Garden is particularly well suited for such internships because the student can be given responsible work which would normally be handled by the

professional staff in a larger institution. Bartram's

Garden would benefit from the students' productivity while

the student would gain a valuable work experience.

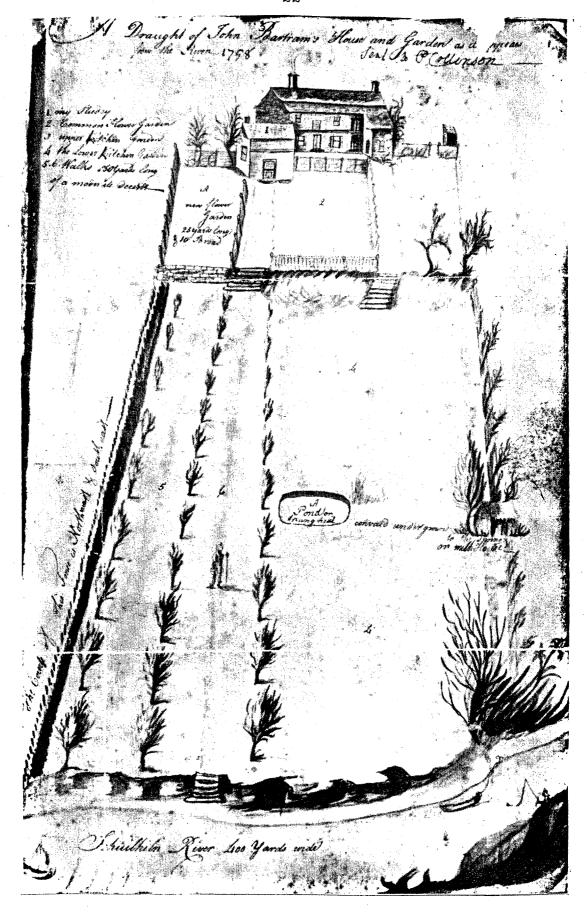
#### CHAPTER II

#### DESIGN PROSPECTUS

## General Design Criteria

As shown in Chapter I, Bartram's Garden was not a landscape garden, nor were the plants set out in any particular ornamental or botanic arrangement. Though little information remains on the actual planting design, the general arrangement of the various parts of the garden can be seen in a drawing, probably by William Bartram, sent to Peter Collinson in 1758 (see page 22). Shown specifically are a "new flower garden," a "common flower garden," several kitchen gardens, alleys of trees, and a pond with a spring house. This chapter deals with the incorporation of these as well as other functional and interpretive features into the present garden.

Though Bartram seemed to situate plants haphazardly in his garden, he observed that individual species are adapted to various ecological situations. In numerous letters to his fellow botanists, Bartram described the habitat where the species were found and recommended they be planted in a similar situation; in the <u>Broadside Catalogue</u> of 1783 the soil and moisture requirements were listed for each



species. In fact, Manasseh Cutler observed that in Bartram's Garden "There is no situation in which plants or trees are found but that they may be propagated here in one that is similar."

A testing of the soil of Bartram's Garden has shown it to be relatively uniform throughout, having a silt-loam texture and a pH ranging from 4.7 to 5.3 [see Appendix I]. Consequently, the major remaining factors in determining placement of species are soil moisture and wind and sun exposure.

## Visitor Circulation

The present grid walkway system, not being authentic, was probably added between 1893, the year the City of Philadelphia acquired the property and 1907, when it was shown on a diagram of Bartram's Garden. The 1758 drawing shows two "walks 150 yards long of a moderate descent" leading from the house to the river.

If the present walkways were removed so as to authentically restore the garden, no efficient means of visitor circulation would remain. Thus, it is recommended that these walks be left intact. Any revision of the walks to make them seem more appropriate would only tend to give a false sense of authenticity. An exception to this general rule involves the walks on the upper terrace which require revision. These walks, presently curving out from the center

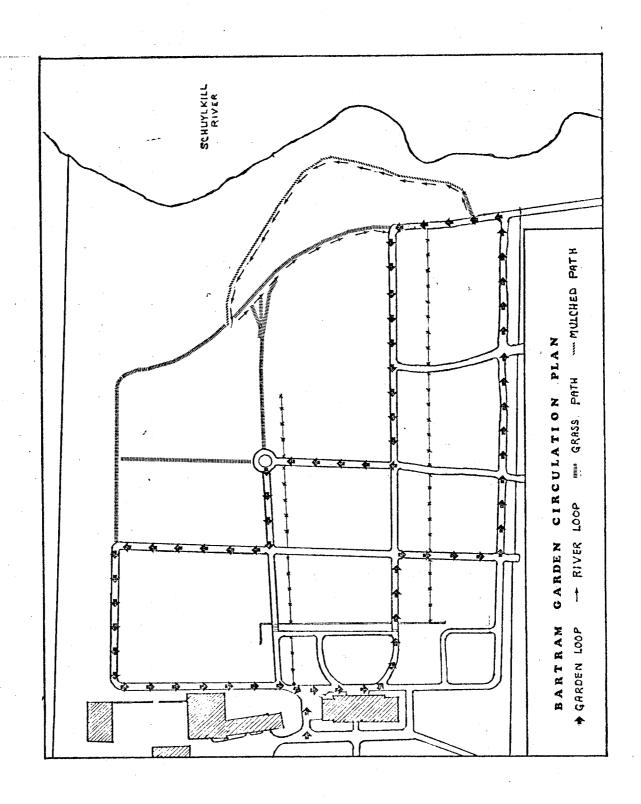
of the house, suggest a formal pleasure garden. They should be restored to their original straight pattern so that their original utilitarian purpose would be apparent.

To supplement the paved walkways, grassy trails are recommended in the northeast section of the garden and along the river (see circulation plan, page 25). These trails should be close-mowed at weekly intervals to clearly differentiate the trail and make it easy to traverse. In the boggy areas along the river the trail should be mulched heavily with wood chips.

A loop route in conjunction with a self-guided tour would aid the visitor to the garden. This loop route would pass near most of the interesting plants and features in the garden without causing visitors to retrace their steps. A suggested route is shown on page 25. Except for the segment along the river, the route is on paved walks. This river segment of the loop could be easily omitted in inclement weather or by those not able to descend the rough trail to the river. Each point of interest along the trail should be labeled with a number corresponding to items in the self-guided tour pamphlet (see page 11).

# Kitchen and Flower Gardens of the 1758 Drawing

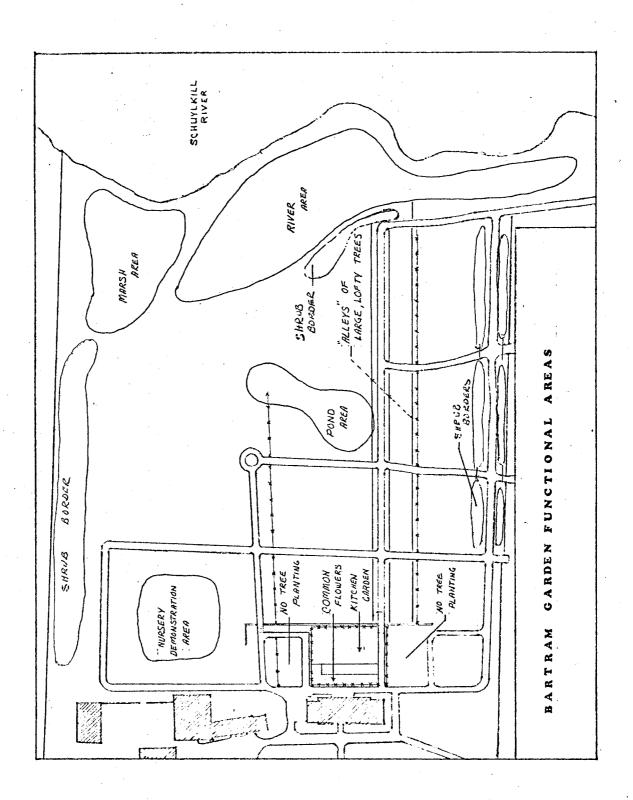
As seen in the 1758 drawing, Bartram had areas in his garden which he called the new flower garden, the common flower garden, and the upper and lower kitchen gardens.



Except for the common flower garden area, all of these are presently planted with outstanding mature trees, thereby necessitating the relocation of those areas today. The upper terrace by the house, site of Bartram's new flower garden, common flower garden, and upper kitchen garden, should not be planted with woody materials in the future [see map of functional areas, page 27]. For the present, however, the presence of a magnificent Yellowwood (Cladrastis lutea) and Black Maple (Acer nigrum) makes complete restoration of the new flower garden and upper kitchen garden undesirable.

The common flower garden can be immediately restored in the area east of the house. This entire area should be enclosed with a rustic picket fence as shown in the 1758 drawing. Bartram's study, which once stood in the southwest corner of this area, should be represented by stones laid in the soil where the walls once were. While resources are limited, the kitchen garden could be represented and interpreted in this area. Later, as funds become available, the kitchen garden could be moved to the more spacious area east of the barn. All gardens should have a simple rectangular design; elaborate geometric designs sometimes associated with colonial gardens should be avoided.

The large areas Bartram called the lower kitchen gardens are now extensively planted with mature trees and



shrubs. Since Bartram had eleven children, the purpose of this extensive kitchen garden is easily understood. For interpretive purposes today, however, a smaller kitchen garden in another open area will be adequate, thus allowing tree planting to continue in the lower kitchen garden. The interpretation of the kitchen garden should note the sizes and locations of the original kitchen gardens.

#### Alleys

The 1758 drawing shows three rows of trees flanking the two "walks of moderate descent." The trees, apparently not equally spaced, are in straight lines running from the base of the upper terrace down to the river bank. The Reverend Manasseh Cutler confirmed this arrangement when he wrote, "We ranged several alleys . . . From the house is a walk to the river, between two rows of large, lofty trees, all of different kinds . . ."

The restoration of this garden feature should begin immediately. Where there are open spaces along these rows, trees of "large, lofty" habit should be planted. As in the original alleys, many different species should be represented, chosen in accordance with the criteria listed in Chapter I.

# House Wall Plantings

The small beds immediately next to the house are a highly visible part of the garden, demanding immediate planting and interpretation. Fortunately, information is available

on many of the plants Bartram had in this area. Since the house walls provided winter shelter from the sun and the winds, Bartram grew many tender shrubs and vines in this area. In a 1763 letter to Peter Collinson, he wrote:

this day I dug up ye pomegranate (<u>Punica granatum</u>) and planted it close by ye wall to be killed down to ye ground every sharp winter as ye rest have done for 20 years<sup>4</sup>

As early as 1743 Bartram reported to Collinson: "My pomegranate its 4 foot high." Similarly, in a 1758 letter to Collinson, Bartram observed:

these kinds of tenderish plants that will endure your winter frosts must be planted in our eastern exposition. I design to try how our figs (Ficus carica) will bear such treatment for in a warm situation thay are killed to ye root every winter

Thus, Figs and Pomegranates, as well as other tender species, would be appropriate plantings along the eastern house wall.

Near the southeast corner of the house, a Pear should be planted to take the place of the famed Petre Pear (see Appendix II ). Bartram's specimen was praised in the 1860 edition of Huffy's North American Pomologist:

This fine autumn pear originated from a seed of White Doyenne from London to the elder John Bartram by Lady Petre in 1735. The original tree, now about 125 years old, is yet standing at Bartram's Garden . . . Several of the seedlings raised by Bartram from the Petre still remain on the premises; the Chapman, however, is the only one that possesses any merit. 7

Because the Petre Pear is no longer available, the Chapman Pear, presently being grown by a few specialty nurseries, would be a good substitute.

A Jujube (Zizyphus jujuba) should be planted to replace the historic specimen near the northeast corner of the house. The original tree, planted in 1735, was apparently still thriving in 1907 when a writer noted its "fine, bright-green, glossy foliage makes the topmost branches, waving above the house, look, as the gardener says like strings of smilax."

No information has been found concerning plantings for the west house wall. Hardy vines, however, would seem to be appropriate since the wall offers an ideal situation for climbing plants.

#### Shrub Plantings

To ensure good culture and easy maintenance, most shrubs should be grown in informal mulched borders located as shown in the functional diagram. In a 1762 letter to Peter Collinson, Bartram furnished precedent for this concept: "I planted it [Loblolly Bay (Gordonia lasianthus)] in ye highest border of my upper garden." The actual placement of each species should depend on its growth rate, ultimate size, and cultural requirements.

# Herbaceous Plantings

The scope of this study does not include specific recommendations for herbaceous plantings. This is not to say that they were not or should not be an important part of Bartram's Garden. Besides the development of the common

flower garden on the upper terrace, naturalized plantings of herbaceous plants in the shrub borders are recommended.

These plantings should be designed to require only a low level of maintenance, and care should be taken to avoid an elaborate English border planting.

Bulbs should likewise be naturalized in the borders and in grassy areas that can be left unmowed until the bulbs' foliage dies down. In 1763 Bartram wrote to Collinson, "I have thousands of ye common sorts (of bulbs) which may be sent to ye utmost parts of ye earth with only nailing up in a dry box." Besides common bulbs, Bartram had many unusual varieties which were sent to him by his many correspondents (see Appendix III). Thus, large numbers of naturalized bulbs throughout the garden, creating a striking horticultural display, would be historically authentic. Through the proper publicity, the flowering bulbs could be an important element in attracting visitors to Bartram's Garden during the early spring months.

# Pond Area

The 1758 drawing of the garden shows a "pond or spring head" with a "convaid [pipe] under ground to a spring or milk house." The Reverend Manasseh Cutler noted this "artificial pond" and its "good collection of aquatic plants." This area should be left unplanted and undisturbed pending an archeological investigation. The pond could then be

rebuilt to its original dimensions and planted with the appropriate aquatic plants.

## River Bottom Area

The Schuylkill River is an integral part of Bartram's Garden, its banks providing a natural habitat for river bottom plants. On the opposite bank, however, oil refineries mar the landscape, breaking the historic mood of the garden. Thus, the design objective of this area is to unobtrusively screen the industry on the eastern bank without screening the river itself from the garden. This can best be accomplished by planting a belt of both deciduous and evergreen species along the Bartram bank. All species chosen should be tolerant of wet soil and occasional flooding. As these trees grow, the branches should be removed to a height of ten to fifteen feet. In this way the visitor looking down to the river from the garden will be able to see the river under the trees canopy while the canopy itself will screen or at least soften the industrial landscape on the opposite shore.

# Marsh Area

The area in the northeast corner of Bartram's Garden along the Schuylkill River represents an important habitat necessary for the interpretation of the horticulture of John Bartram. This low, boggy marsh is where Bartram would

have planted species he collected from acidic wetlands.

Today, this area would be ideal for growing and displaying such plants for the visiting public.

However, visual observation and soil tests [see Appendix I] show that this area has been seriously damaged by run-off from the neighboring cement works. Not only has the soil been made hard and impervious by sediment from the run-off, but the soil pH has been raised from its natural level of 5.3 to 10.0. Since these readings are based on a logarithmic scale, a soil with a pH of 10.0 is 100,000 times more alkaline than a soil with a pH of 5.0. At this high pH level, the soil cannot support most plant life.

Remedial efforts in this area should restore the area to its natural condition. After provisions are made to prevent future run-off through this area, the damaged soil should be removed and replaced with a rich silt loam soil with a pH approximating 5.3. The grading should be done so that after settling, the present contours and elevations are maintained. The area then should be planted with species appropriate to both Bartram's Garden and this particular environment.

# Nursery Area

It is recommended that a small open plot be set aside as the nursery area. The open field east of the barn would be ideal for this purpose since it is relatively

unplanted and close to the house allowing for high visibility and easy surveillance.

The nursery would be the site of many ongoing demonstrations interpreting the horticultural practices of John Bartram. Rows of young field grown plants, as well as plants in containers, should be in the nursery representing plants Bartram grew for sale abroad and in the colonies. Propagation from seed, cuttings, and by grafting should be demonstrated using appropriate species.

Fruit tree grafting exhibits would be historically appropriate and of particular interest to visitors. In 1763

John Bartram wrote Collinson:

. . . ye pear raised from her [Lady Petre] seed hath bore a number of ye finest relished fruits that I think a better is not in ye world and intend next spring to graft several of them Perhaps it will make ye tree retain its fruite better til they are full ripe which is the only defect that above half its fruit drops before they are anyway fit for use and not a quarter stays on til thay are full ripe which is about ye beginning to ye middle of October 12

If young Chapman Pears, a substitute for the Petre Pear, are propagated each year, a succession of young trees with the graft unions clearly visible should always be displayed.

Similarly, propagation from cuttings should be demonstrated. In this case White Cedar (Chamaecyparis thyoides) would be a good example. Collinson, in a 1753 letter to Bartram, noted:

The White Cedar expedition must be pleasant, but it would spoil trade to tell how easily the White Cedar is propagated from cuttings not one will miss I have 2 dozen of the finest straight upright plants from cuttings thou ever saw; but this Gordon and I keep a great secret 13

Hotbeds would be useful for propagating both seeds and cuttings. Detailed construction information can be found in <u>The Gardeners Dictionary</u>, <sup>14</sup> a book John Bartram read and respected. <sup>15</sup>

The entire nursery area should be fenced, as Philip Miller recommended in his <u>Gardeners Dictionary:</u>

You must observe to enclose it, (the nursery) that cattle and vermin may not come in; for these will make great havock with young trees, especially in the winter, when the ground is cover'd with snow, that they have little other food which they can come at.

A few grass paths between the nursery beds will allow the visitors to observe the operations close up as they walk through this area.

This nursery exhibit area should be given high developmental priority. Since Bartram's Garden was not a landscaped pleasure garden, it is clearly important to demonstrate the significance of his horticultural work to the garden visitor.

### CONCLUSION

In a 1769 letter to John Bartram, Benjamin Franklin wrote from London:

You may be useful to your country and to mankind if you sit down quietly in your home, digest the knowledge you have acquired and compile and publish the many observations you have made . . . 1

Later, in that same letter after rambling about other matters, Franklin continued, "and now I mention seeds . . . I wish you would send a few of such as are least common. They are for a particular friend who is very curious."

Though Bartram ignored his friend's first request, we can assume Franklin received his rare seeds. Unfortunately, Bartram was always too busy with his horticultural endeavors to publish his observations. We are fortunate, however, to have his garden which, through proper development, can be a far more effective means of telling the story of John Bartram than any book he might have written.

# FOOTNOTES TO INTRODUCTION

<sup>1</sup>Jeff L. Kenyon and others, <u>Basic Historic Research</u> and Archaeological Feasibility Study of Bartram Park, Museum Historic Research Center, 1975, p. 2.

2<sub>Ibid</sub>.

<sup>3</sup><u>Ibid.</u>, p. 6.

4Emily Reed Cheston, John Bartram: His Garden and House, John Bartram Association, 1953, p. 3.

<sup>5</sup>Rodney H. True, "John Bartram's Life and Botanical Explorations," <u>Bartonia</u>, Dec. 31, 1931, p. 11.

John Bartram to Peter Collinson, June 30, 1763, Edward E. Wildman Transcriptions of John Bartram Correspondence, American Philosophical Society Library.

7True, "Bartram's Life," pp. 12-13.

Peter Collinson to John Bartram, April 9, 1765, Wildman Transcriptions.

9Colonel John Custis of Virginia to Peter Collinson, 1738, Wildman Transcriptions.

Philip Miller to John Bartram, Jan. 12, 1758, Wildman Transcriptions.

11 John Hendley Barnhart, "Significance of John Bartram's Work to Botanical and Horticultural Knowledge," Bartonia, Dec. 31, 1931, pp. 27-28.

12<u>Ibid.</u>, p. 28.

13 Kenyon, "Bartram Park," p. 10.

14<u>Ibid.</u>, p. 12.

15 The Historic Home of John Bartram: Colonial Botanist, John Bartram Association, undated brochure, p. 3.

### FOOTNOTES TO CHAPTER I

- <sup>1</sup>John Bartram to Dr. Sibthorp, professor at Oxford, Fall 1762, Wildman Transcriptions.
- <sup>2</sup>John de Ponthieu to John Bartram, London, July 16, 1761. Wildman Transcriptions.
- <sup>3</sup>Ralph L. Snodsmith, "Let's Not Be Serious," Long-wood Program Seminars, University of Delaware, 1973, 5: p. 56.
- <sup>4</sup>Joseph Ewan, "A Brief Appraisal of John Bartram," Plants and Gardens: Handbook on Origins of American Horticulture, Brooklyn Botanic Garden, 1968, 23:3: pp. 77-78.
- 5"Points of Interest" Bartram's Garden Brochure, John Bartram Association.
- William Parker Cutler and Julia Perkins Cutler, Life, Journals and Correspondence of Rev. Manasseh Cutler, LL.D, (Cincinnati: Robert Clark and Co., 1888), I: p. 273.
- William Massey, "The Administration of Historic Gardens," Longwood Program Seminars, University of Delaware, 1974, 6: p. 43.
- Peter Collinson to John Bartram, Jan. 24, 1763, Wildman Transcriptions.
- $^9\mathrm{John}$  Bartram to Dr. Solander, April 26, 1763, Wildman Transcriptions.

### FOOTNOTES TO CHAPTER II

- <sup>1</sup>Cutlers, Manasseh Cutler, p. 273.
- <sup>2</sup>Elizabeth O. Abbot, <u>Bartram's Garden</u>, <u>Philadelphia</u>
  Pa., Philadelphia: John Bartram Association, 1907, p. 18.
  - <sup>3</sup>Cutlers, <u>Manasseh Cutler</u>, p. 274.
- $^4\mathrm{John}$  Bartram to Peter Collinson, Nov. 1763, Wildman Transcriptions.
- <sup>5</sup>John Bartram to Peter Collinson, June 21, 1743, Wildman Transcriptions.
- John Bartram to Peter Collinson (Jan. 3, 1758), Wildman Transcriptions.
- 7William D. Brinckle, ed., <u>Huffy's North American</u> Pomologist, (Philadelphia: A. Huffy, 1860), p. 321.
  - 8 Abbot, Bartram's Garden, p. 273.
- John Bartram to Peter Collinson, Aug. 15, 1762, Wildman Transcriptions.
- 10 John Bartram to Peter Collinson, May 1, 1763, Wildman Transcriptions.
  - 11 Cutlers, Manasseh Cutler, p. 273.
- 12 John Bartram to Peter Collinson, Autumn 1763, Wildman Transcriptions.
- 13 Peter Collinson to John Bartram, Feb. 13, 1753, Wildman Transcriptions.
- 14 Philip Miller, The Gardeners Dictionary, abridged edition, 1754, New York: Verlag Von J. Cramer, 1969, p. 644.
- 15 John Bartram to Philip Miller, June 16, 1758, Wildman Transcriptions.
  - 16 Miller, Dictionary, p. 955.

# FOOTNOTE TO CONCLUSION

<sup>1</sup>Benjamin Franklin to John Bartram, London, July 9, 1769, Wildman Transcriptions.

### BIBLIOGRAPHY

- Abbot, Elizabeth O. Bartram's Garden. Philadelphia Pa. Philadelphia: John Bartram Association, 1907.
- "An Account of Bartram's Garden." Reprint of The Horticulturist in 1850. Philadelphia: Newman F. McGirr, 1929.
- Barnhart, Dr. John J. "Significance of John Bartram's Work to Botanical and Horticultural Knowledge." Bartonia, December 31, 1931, pp. 24-34.
- Bartram, John. "Diary of a Journey Through the Carolinas, Georgia and Florida from July 1, 1765 to April 10, 1766." Reprinted from Transactions of American Philosophical Society, New Series, XXXIII: December, 1942.
- Bartram, William. <u>Travels of William Bartram</u>. Philadelphia: James & Johnson, 1791; reprint ed., Mark Van Doren, ed. Dover Publications, 1928.
- Brinckle, William D., ed. <u>Huffy's North American Pomologist</u>. Philadelphia: A. Huffy, 1860.
- Carr, Robert and Carr, William. Catalogue of Trees, Shrubs, and Herbaceous Plants at Bartram's Botanical Garden. Philadelphia: 1814.
- Cheston, Emily Reed. John Bartram: His Garden and House. John Bartram Association, 1953.
- Cruickshank, Helen G. <u>John and William Bartrams' America</u>. New York: The <u>Devin-Adair Company</u>, 1957.
- Darlington, William. Memorials of John Bartram & Humphrey Marshal. Philadelphia: Lindsay & Blakeston, 1849; reprint ed., New York, Hofner Publishing Company, 1967.
- Ewan, Joseph. "A Brief Appraisal of John Bartram." Plants and Gardens: Handbook on the Origins of American Horticulture. Brooklyn Botanic Garden, 1968, 23:3.

- Ewan, Joseph, ed. A Short History of Botany in the United States. New York: Hofner Publishing Company, 1969.
- Fernald, Merrit L. Gray's Manual of Botany. New York: American Book Company, 1950.
- Fogg, John M. "A List of Bartram Trees and Shrubs." Morris
  Arboretum Bulletin 18: December, 1967.
- Harshberger, John W. The Botanists of Philadelphia and Their Work. Philadelphia: T. C. Davis and Sons, 1899.
- Hillier, Harold G. Hilliers' Manual of Trees and Shrubs. Winchester, England: Hillier and Sons, 1973.
- John Bartram Association. Points of Interest. undated Bartram's Garden Brochure.
- . The Historic Home of John Bartram: Colonial Botanist. undated Bartram's Garden Brochure.
- Keeler, Harriet L. Our Northern Shrubs. New York: Dover Publications, 1969.
- Kenyon, Jeff L., Hunter, Stan M. and Schenck, Helen. Basic Historic Research and Archaeological Feasibility Study of Bartram Park. Museum Historic Research Center, 1975.
- Massey, William U. "The Administration of Historic Gardens." Longwood Program Seminars, Univ. of Delaware, 1974.
- Miller, Philip. The Gardeners Dictionary. London: 1754; reprint ed. New York: Verlag von J. Cramer, 1969.
- Philadelphia, Pennsylvania. American Philosophical Society. Edward E. Wildman, "Transcription of John Bartram Correspondence," 1956.
- Rafinesque, C. S. "Account of the Largest Tree Near Philadelphia." Saturday Evening Post, May 1831.
- Philadelphia. Pennsylvania Historical Society. "Bartram Papers."
- Rehder, Alfred. Manual of Cultivated Trees & Shrubs. New York: Macmillan Company, 1940.
- Sargent, Charles Sprague Sargent. Manual of the Trees of North America. New York: Dover, 1965.

- Snodsmith, Ralph L. "Let's Not Be Serious." Longwood Program Seminars, University of Delaware, 1973.
- Tilden, Freeman. <u>Interpreting Our Heritage</u>. Chapel Hill: University of North Carolina Press, 1957.
- True, Rodney H. "John Bartram's Life and Botanical Explorations." Bartonia, December 31, 1931. pp. 7-19.
- Walker, Elizabeth C. "Bartram's Garden Catalogue 1783."

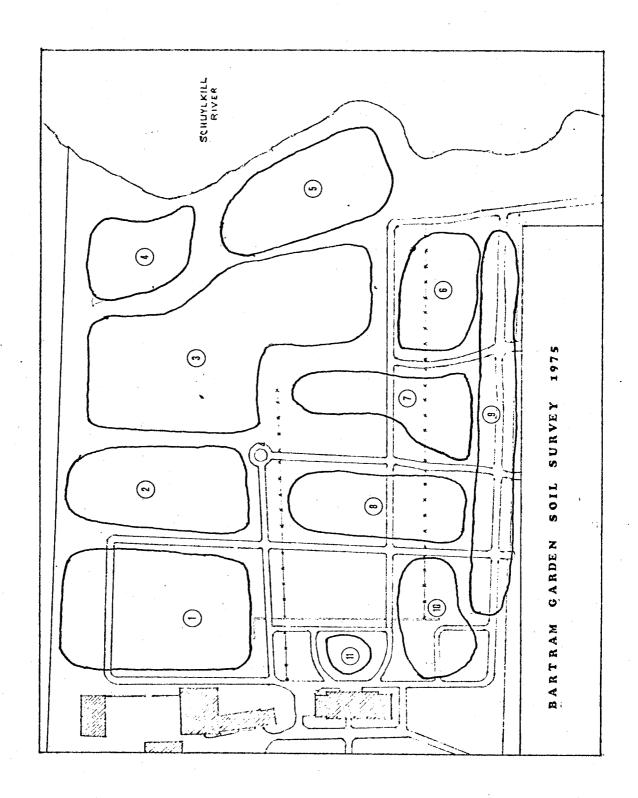
  Newsletter of the Arboretum of the Barnes Foundation, January, 1970.
- Wyman, Donald. Shrubs and Vines for American Gardens. New York: The Macmillan Company, 1971.
- . Trees for American Gardens. New York: Macmillan Company, 1971.

# APPENDIX I

Soil Survey

i											
Recommendations	2 cups of limestone per square yard $1/8$ to $1/4$ cup of ammonium nitrate per plant.	same as #1.	2 cups of limestone per square yard 1/2 cup of 10-20-10 per plant.	soil severely damaged by alkaline run-off.	same as $\#3$ .	2-1/2 cups of limestone per square yard $1/4$ cup of 10-10-10 per plant.	same as #3.	same as #1.	1/8 cup ammonium nitrate per plant in spring.	same as #1.	2-1/2 cups of limestone per square yard $1/2$ cup $12-4-8$ per square yard.
Hd	5.0	6.4	5.3	10.0	6.4	4.7	5.5	5.3	5.1	1.7	1.4
Soil Texture	silt-loam	silt-loam	silt-loam	silt-loam	black silt- loam	silt-loam	silt-loam	silt-loam	silt-loam	silt-loam	silt-loam
Sample Number*	H	CV	Μ	7	٠.	9	7	- 100	6	10	11

\*See Soil Survey Map - page 45.



### APPENDIX II

### ANNOTATED PLANT LIST

The following are woody plant species historically appropriate to John Bartram's Garden, arranged in alphabetical order according to modern scientific name. Following the modern scientific name, Bartram's scientific and common names for that species are in parenthesis. When a modern name could not be determined for a Bartram species, only the Bartram name is listed. When possible, an introduction date, documented in Hilliers' Manual of Trees and Shrubs or Alfred Rehder's Manual of Cultivated Trees and Shrubs, is listed for each species. This denotes when the species was thought to have been first introduced to European Gardens or when it was first documented as in cultivation in Europe. Many of these dates are shown to be inaccurate in the Bartram correspondence. All species listed in the Broadside Catalogue of 1783 are noted. Also, quotations of interpretive interest from Bartram's correspondence are included.

Abies balsamea [Pinus abies canadensis - Balm of Gilead Fir] I. 1696

Broadside Catalogue
John Bartram to Peter Collinson, September 5, 1742, Wildman

Transcriptions.

I have lately returned from ye Cats Kill mountains having gathered a fine parcel of ye Balm Cones just at ye time of thair full ripeness with many other curious seed John Bartram to Peter Collinson, December 10, 1747, Wildman

Transcriptions.

but ye Balm of Gilead Fir lets drop both scales and seed together and leave ve central cylinder of ye cone sticking to ye tree before it is quite dry like our tulip tree

Acer negundo [A. negundo - Ash Leav'd Maple]

Broadside Catalogue
John Bartram to Peter Collinson, August 20, 1753, Wildman
Transcriptions
Ash Leaved Maple sent to Collinson.

Acer pensylvanicum [A. ornata - Striped Bark Maple]
I. 1755 - probably a Bartram introduction
Broadside Catalogue

John Bartram to Peter Collinson, August 20, 1753, Wildman Transcriptions

The striped Maple's place of growth being particular to ye northern ridges of our blew mountains from no. river to Susquenana

Acer rubrum [A. rubra - Scarlet Maple]

Broadside Catalogue
Bartram's description of native trees, 1743, Wildman Transcriptions

ye tree [Scarlet Maple] grows with us in moist swampy ground with a clay or gravelly bottom by runs or rivulets

Acer saccharinum [A. glauca - Silver Leav'd Maple] I. 1725

Broadside Catalogue

John Bartram to Peter Collinson 1742, Wildman Transcriptions in the box are ye keys of our great silver jaged leaved maple

Bartram's description of native trees, 1743, Wildman Transcriptions

this tree grows generally on ye banks of rivers above ye tide to a large spreading tree

Acer saccharum [A. sachariflua - Sugar Maple]

Peter Collinson to John Bartram, February 3, 1738, Wildman Transcriptions

The leaves of the Sugar Tree are very informing and are a great curiosity but we wish thee had gathered little branches with the flowers on them and some little branches with the keys on them. The seeds of this tree, which by the leaves and keys is a real Maple, I cracked many of them and not one had a kernal in them which I am surprised at notwithstanding all thy care Whether they was

not fully ripe thee canst best judge but so it is We desire thee next year to make another attempt to send us some specimens

Acer spicatum [Acer arbustiva - Dwarf Mountain Maple]
1. to England 1750
Bartram's description of Native Trees 1753, Wildman Transcriptions

[Dwarf Mountain Maple] grows about 8 or 9 foot high & as thick as ones arm ye shoots in winter & spring is red

<u>Aesculus hippocastanum</u> [Horse Chestnutt]

I. to America from Europe

Peter Collinson to John Bartram September 2, 1739

"Horse Chestnutt" seeds sent to Bartram
John St. Clair to John Bartram November 4, 1761
I must depend on you for some seeds of
the . . . Horse Chestnut . . .

Peter Collinson to John Bartram January 1, 1763

I am greatly pleased the long-expected
Horse Chestnut has gratified thee with its
beautiful flowers. I think it exceeds a
Hyacinth. But to see a pyramid fifty feet
high, and every extreme bud a blossom, is
beyond thy imagination, but one of the
finest sights in the world. But pray tell
me if your curious people have not had
these fine trees long before

Aesculus octandra [A. octandra - New River Horse Chestnut]

I. to England 1764 - probably a Bartram introduction

Broadside Catalogue

Peter Collinson to John Bartram June 30, 1764, Wildman Tran-

I shall be glad to see it for flowers

scriptions
The New River Horse Chestnut I know only by

Aesculus pavia [A. caroliniana - Scarlet Flowering Horse Chestnut]
I. 1711

Broadside Catalogue

Leafe

<u>Alnus maritima [A. maritima - Seaside Alder]</u> Broadside Catalogue

<u>Alnus rugosa [A. rubra, betula</u> - Common Alder] <u>Broadside Catalogue</u> <u>Amelanchier humilis? [Mespilus humilis - Dwarf Hawthorn]</u>
<u>Broadside Catalogue</u>

<u>Amelanchier intermedia? [Crataegus canadensis - Dwarf Swamp Service]</u>
Broadside Catalogue

Amelanchier oblongifolia [Mespilus nivea]
Broadside Catalogue

Amorpha fruticosa - Bastard Indigo [A. indigo]
I. to England 1724
Broadside Catalogue

Ampelopsis arborea [Vitis petroselenifolia - Carolina Pepper Tree]
Broadside Catalogue

[<u>Andromeda globulifera</u> - Boggy Andromeda] Broadside Catalogue

[<u>Andromeda crassifolia</u> - Evergreen Andromeda] Broadside Catalogue

Andromeda glaucophylla [A. latifolia - Male Whortleberry] Broadside Catalogue

- ? [Andromeda lanceolata Virginia Red Buds] Broadside Catalogue
- ? [Andromeda Spicata]
  Broadside Catalogue

Anisostichus capreolatus [Bignonia crucigera - Cross Vine] [Bignonia folius conjugatus]

I. to England 1653

Broadside Catalogue
John Bartram to Dr. Solander April 26, 1763, Wildman Transcriptions

ye bignonia folius conjugatis ran up ye no. east corner of my house last summer 20 feet high ye leaves and vine of which is now very green but one at ye southwest end is bare of leaves tho ye vine is green.

Anthyllis vulneraria [Amorpha barba-jovis]
I. from Europe
Broadside Catalogue

Apios americana [Glycine apios - Indian Potatoes] Broadside Catalogue

Aralia nudicaulis [A. nudicaulis - False Spiknard] Broadside Catalogue

Aralia ralemosa [A. ralemosa - Spiknard] Broadside Catalogue

Aralia spinosa [A. spinosa - Prickly Ash] I. to England 1688

Broadside Catalogue John Bartram to Peter Collinson June 21, 1743, Wildman Transcriptions

ye Aralia spinosa I brought from Virginia -It grows well with me

John Bartram to Peter Collinson August 20, 1753 Aralia spinosa sent

<u>Aristolochia durior [A. frutescens - Common Birthwort]</u> I. to England 1783 - possible Bartram introduction Broadside Catalogue Peter Collinson to John Bartram January 20, 1734, Wildman Transcriptions send also a Root of the Aristolochia which is such sovereign Remedy for sore Breast would be well worth having.

# Arbutus unedo [Arbutus]

I. from Europe

John Bartram to Peter Collinson June 24, 1760, Wildman Transcriptions

I have received ye . . . arbutus in good order

Aronia arbutifolia [Crategus prunifolia - Red Swamp Service] Broadside Catalogue

Aronia melanocarpa [Crategus prunifolia - Black Swamp Service

I. to England 1700

Broadside Catalogue John Bartram to Philip Miller (November 3, 1756), Wildman

Transcriptions

We have two other species of Crategus growing with us ye one grows 2 foot high and bears a few dark fruit early ripe and very choaking ye other grows 7 or 8 foot high ye berries red and very late ripe and as harsh as ye

other ye leaves is hoary underside ye flower is very pretty thay was so oily and smelt so strong in gathering as caused a sickness at my stomach and head ache . . .

Asimina triloba [Anona nuda - Papaw Apple]

I. to England in 1736 by Collinson - early Bartram introduction

Broadside Catalogue

Peter Collinson to John Bartram March 14, 1736, Darlington Memorials

There is another plant that we want seed and specimens of, that is the Papaw. His Lordship has one plant of it, but they tell us such stories of its fruit, that we would be glad to see it; which may be easily done by gathering two or three bunches of its fruit, full ripe, and putting them into strong rum in a jar or pot, and corking it up close, will keep well there . . .

John Bartram to Peter Collinson (1738), Wildman Transcription
I have provided ye flowers of the Papaw for
him & shall endeavor to procure ye fruits
. . . This day (near the Susquehana) I
observed I believe a hundred Papaw Trees
of different magnitudes some near 30 feet
high and 8 inches diameter but I could not
see one fruit but abundance of dried blossoms that was not dropped off . . . indeed
ye papaw will bear ye shade as well as most
yet I believe overmuch shade may cause
sterility . . .

<u>Berberis canadensis [Oxycantha canadensis - Canada Barbery]</u> <u>Broadside Catalogue</u>

Betula lenta [B. lenta - Red Birch]

I. to England 1759

Broadside Catalogue

Bartram's Description of Native Trees 1753, Wildman Transcriptions

being tapped in ye spring produceth a fine wine which being evaporated maketh good syrup or sugar ye bark is black and does not shed off as other Birches do

Betula nana [B. nana - Dwarf Birch] Broadside Catalogue Betula nigra [B. nigra - Sweet Birch]

I. by Peter Collinson 1736 - probably Bartram introduction Broadside Catalogue

John Bartram to Peter Collinson September 25, 1740, Wildman

Transcriptions

The Sugar Birch is worthy of your care to cultivate it for its straight and lofty growth, sweet juice and medicinal bark — it naturally grows on ye cold north sides of hills where there is springs or rivuletts near or in moist ground at ye bottom of hills tho it often times groweth in ye clifts of rocks and no ground can be too stoney for them.

Betula papyrifera [B. papyrifera - White Birch of Canada] I. to England 1750 - probably by Bartram Broadside Catalogue

John Bartram to John Clayton September 1, 1744, Wildman

Transcriptions

thee may easily know ye paper birch do but lanch ye bark perpendicularly on one side and thee may easily pull 8 or 10 foulds of paper as thin as parchment all round ye tree I have put in this letter a specimen of birch paper

Betula populifolia [B. populifolia - Aspen Birch]
I. to England 1750 - probably by Bartram
John Bartram to Peter Collinson December 1744, Wildman Transcriptions

I have this winter been a great way in Jersey to fetch . . . a fine birch with leaves somewhat like a poplar and planted it in my garden to send to you next fall

<u>Callicarpa americana</u> [<u>Calicarpa</u> - Bermudas Mulberry] Broadside Catalogue

Calycanthus floridus [Calicanthus - Sweet Shrub of Carolina]
I. to England 1726
Broadside Catalogue

John Bartram to Peter Collinson August 19, 1764
I am mighty fond of ye flowering or sweet shrub I think nothing in vegetable nature adorns borders better under trees

Campsis radicans [Campsis radicans - Trumpet Flower]
I. to England 1640
Broadside Catalogue

<u>Carpinus</u> <u>caroliniana</u> [<u>Carpinus</u> <u>betulus</u> - Hophornbeam]

Broadside Catalogue

John Bartram to Peter Collinson August 20, 1753, Wildman Transcriptions

it grows commonly by ye banks of rivers near ye tide

<u>Carya ovata [Juglans hycory - Thick Shell Hycory]</u>
I. 1629
Broadside Catalogue

<u>Carya tomentosa</u> [<u>Juglans</u> <u>alba</u> - White Walnut] I. 1766 Broadside Catalogue

<u>Castanea</u> <u>dentata</u> [<u>Fagus</u> <u>castanea</u> - Chestnut]

Broadside Catalogue

Bartram's description of Native Trees 1753, Wildman Transcriptions

ye kernals is very sweet and ye wood is very durable for rails which will last fourty years in fences

Castanea pumila [Fagus castanea pumila - Chinquapin]
I. to England 1699
Broadside Catalogue

Catalpa Bignonioides [Bignona catalpa - Catalpa]
I. to England 1726
Broadside Catalogue

<u>Cheanothus americanus [Cheanothus foliis trinerviis - Red Root]</u>

I. to England 1713 Broadside Catalogue

Cedrus lebani [Cedar of Lebanon]

I. to America via England

Peter Collinson to John Bartram July 19, 1753, Darlington's Memorials

In the Box, with the other things, I have sent two fine Cedar of Lebanon Cones

John Bartram to Peter Collinson July 1754, Wildman Transcriptions

I have now come up a fine young cedar of lebanon but alass a hot scorching day in ye midst of harvest killed it tho shaded John Bartram to Peter Collinson March 1755, Wildman Transcriptions

I should be glad to try ye Cedar of lebanon once more

John Bartram to Peter Collinson September 28, 1756
I have out 3 cedars of lebanon

John Bartram to Peter Collinson Autumn 1756 all my cedars of lebanon is dead do what I may ye root perished white ye leaves and stalk looked fresh and green.

Celastrus scandens [C. scandens - Euonymus]

I. to England by Peter Collinson 1736 - possibly Bartram introduction

Broadside Catalogue

John Bartram to Peter Collinson, December 1744, Darlington's Memorials

I have put two or three handsful of the seeds of climbing species of Euonymus which . . . thee wanted very much. Its berries make a fine appearance in the fall. It twists about the poles and trees like hops

Celtis occidentalis [C. occidentalis - Lote or Nettle Tree]
I. to England 1656
Broadside Catalogue

Cephalanthus occidentalis [C. capitilis pendulis - Button Wood]

I. to England 1735 Broadside Catalogue

<u>Cercis canadensis [Cercis siliquastrum - Judas Tree]</u>
I. to England 1730
Broadside Catalogue

Chamaecyparis thyoides [Cupressus thyoides - White Cedar]
I. 1736 by John Bartram via Peter Collinson
Broadside Catalogue
Peter Collinson to John Bartram April 6, 1738, Wildman Transcriptions

pray look out for a plant or two of White Cedar for I am afraid that the last Sent Me

will go off tho it has a Clod of earth about it The smell of the leaves a little dry'd smells like to Cinamon it is a fine plant if mine stands it will be the only one in England tho I have hope to raise it from seed this year

John Bartram to Mark Catesby October 1741, Wildman Tran-

scriptions

Bartram collected White Cedar at Cape May, New Jersey

Peter Collinson to John Bartram February 13, 1753, Wildman Transcriptions

The White Cedar expedition must be pleasant but it would spoil trade to tell how easily the White Cedar is propagated from cuttings not one will miss I have 2 dozen of the finest straight upright plants from cuttings thou ever saw; but this Gordon and I keep a great secret

Chionanthus virginilus [Chionanthus - Fringe Tree]

I. to England 1736

Broadside Catalogue

Cladrastis lutea [Yellow Wood]\*

I. to England 1812

Alexander Garden to John Bartram June 12, 1761, Wildman Transcriptions

The Yellow Wood have perished and all but those I sent you

Martha Logan to John Bartram, ? 1761, Wildman Transcriptions
The Yellow Wood bears no seed and goes wild
when it is propagated only from a slip.
Wherefore, have sent you some in a box of
earth, Tho it is rather late to move it but
as tis not difficult to grow hope they will
like If not I can with ease send you some
more next winter

Clethra alnifolia [C. alnifolia - Clethra]
I. to England 1731

Broadside Catalogue

Peter Collinson to John Bartram March 5, 1750, Wildman Transcriptions

<sup>\*</sup> It is not clear that "Yellow Wood" actually refers to Cladrastis lutea.

pray repair these losses besides a Sweet Spirea alni folia named Clethra p. Linnaeus which I much admire . . .

Comptonia peregrina [Liquidambar asplenifolia - Sweet Fern] I. to England 1714
Broadside Catalogue

<u>Cornus canadensis [Cornus venosa - Mountain Dwarf Cornus]</u>
I. to England 1774

John Bartram to Peter Collinson ? 1756, Wildman Transcription

. . a more humble plant I showed him which
I brought from ye top of ye Catts kill mountains about 3 or 4 inches high with leaves
like a cornus placed crossways and horizontal
out of ye center of which grows a prety red
berry of a pleasant taste ye roots is
fibrous & runs horizontally under ye surface
& shoots up at almost every half foot distance
so that there is near an acre allmost covered
with it this is ye onely place I can remember
ever to have seen it . .

Cornus florida [C. florida - Flowering Dogwood]
I. 1730

Broadside Catalogue

John Bartram to Peter Collinson November 17, 1742, Wildman Bartram writes that Dogwood berries have been sent.

Cornus mas [C. mas]
I. to America from England

John Bartram to Peter Collinson September 25, 1757, Wildman So doth ye Cornus mas [grow finely].

<u>Cornus stolonifera</u> ? [<u>C. perlata</u> - White Berried Swamp Dog-wood]
I. 1656
Broadside Catalogue

<u>Cornus sanguinea</u> [<u>C. sanguinea</u> - Red Willow]

<u>I. from Europe to America</u>

Broadside Catalogue

Cornus alternifolia ? [C. sylvestris]
I. 1760
Broadside Catalogue

Corylus americana [Corylus nucleo rotundiori duriori - Hazelnut]
I. 1798

Broadside Catalogue

<u>Crataegus crus-galli</u> [<u>Mespilus spinoza - Cockspur Hawthorn</u>]

<u>I. to England 1691</u>

<u>Broadside Catalogue</u>

<u>Crataegus sp. [Mespilis apiifolia - Carolina Hawthorn]</u> Broadside <u>Catalogue</u>

<u>Crataegus</u> <u>sp. [Mespilis azarol - Great Hawthorn]</u> <u>Broadside Catalogue</u>

<u>Crataegus</u> <u>sp. [Mespilis pumila]</u> <u>Broadside Catalogue</u>

<u>Cupressus sempervirens</u> [Italian Cypress]

I. to America via England

John Bartram to Peter Collinson October 16, 1757, Wildman Transcriptions

ye Italian Cypress grows well but how they will fare next winter (which I expect will be hard enough) I can't say.

John Bartram to Peter Collinson January 3, 1758, Wildman Transcriptions

We have now exceedingly warm weather like May after a short spell of snow and frost which hath killed ye tops of my Italian Cypress that was planted in a south exposure while ye one that was exposed to the north was not hurt.

<u>Cvrilla racemiflora</u> [<u>Andromeda pumata</u> - Iron Wood of Carolina]

<u>I. to England 1765</u>

Broadside Catalogue

<u>Diervilla lonicera [Diarvilla canadensis - Diarvilla]</u>
I. to England 1720
Broadside Catalogue

<u>Diospyros virginia [Diospyros guajacina - Persemmon]</u>
1. 1629

Broadside Catalogue
John Bartram to Peter Collinson 1739, Wildman Transcriptions
they are extra disagreeable to eat untill they
are thorow ripe and will fall with shaking ye
tree Then their pulp is very delicious but
their skin which is as thin as ye finest
paper still retains an astringent bitterness

but many of our country people are so greedy of them that thay swallow down skin pulp and seeds all together. I admire thay are not cultivated with great care in Europe instead of many other kinds of fruite which is much inferior to them in goodness. Thay make an excelent liquor or wine for pleasant drinking

Peter Collinson to John Bartram September 2, 1739, Wildman

Transcriptions

It thrives and grows vigorously and bears blossoms but no fruit but I have seen fruite ripe in England but it has little reputation here

Dirca palustris [Dirca - Leather Bark]

I. to England in 1750, probably by Bartram

Broadside Catalogue

John Bartram to Peter Collinson December 1744, Wildman Transcriptions

I designed to go up ye mountains last week to fetch ye thymilea or leatherbark but I have had a sore blow on my back by a horse

Epigea repens [E. procumbens]
I. to England 1736
Broadside Catalogue

Euonymus americana [E. semper virens - Burning Bush of Virginia]
C. in England since 1783
Broadside Catalogue

Euonymus latifolia [E. latifolia]
I. to England 1730
Broadside Catalogue

Franklinia alatamaha [F. alatamaha]
I. to England 1774 by William Bartram
Broadside Catalogue
Article by William Bartram September 20, 1795, Bartram
Papers, Pennsylvania Historical Society
Franklinia I never saw growing naturally
north of ye Banks of the Altamaha in Georgia
yet it completely resists the frosts of our
severest winters and flourishes even excelling
any I saw in its native land

Travels of William Bartram, by William Bartram, Dover Publication 1928, p. 369.

I presently found striking characteristics abundantly sufficient to separate it from that genus (Gordonia) and to establish it the head of a new tribe, which we honored with the name of the illustrious Dr. Benjamin Franklin, Franklinia alatamaha. We never saw it growing in any other place, nor have I since seen it growing in the wild, in all my travels from Pennsylvania to Point Coupe on the Banks of Mississippi, which must be allowed a very singular and inaccountable circumstance; at this place there are two or three acres of ground where it grows plentifully.

Fraxinus americana [F. excelsior - Great White Ash]

T. to England 1724

Broadside Catalogue

Fraxinus nigra [F. nigra - Black Ash]

I. to England 1800 - possible Bartram introduction

Broadside Catalogue

John Bartram to Peter Collinson August 20, 1753, Wildman Transcriptions - Black Ash sent

Fagus grandifolia [F. svlvatica - Beech Tree]
I. to England 1766
Broadside Catalogue

Gardenia jasminoides [Gardenia] Broadside Catalogue

Gaultheria procumbens [Gultheria - Jersey Tea - Mountain Tea]

I. to England 1762

Broadside Catalogue

Gelsemium sempervirens [Bignonia sempervirens - Yellow Jasmin]

Broadside Catalogue
Tender Vine

<u>Gillenia trifoliata [Spirea foliis ternitis - Ipecacuanha]</u>
<u>Broadside Catalogue</u>

Ginkgo biloba

Emily P. Cheston, John Bartram, His House & Garden In 1784 the first three Ginkgos were sent to the U.S.A. from England

One of these was planted in Bartram's Garden and two at Woodlands, then the estate of William Hamilton and now a cemetary.

Gleditsia triacanthos [G. triacanthos - Honey Locust]
I. to England 1700
Broadside Catalogue

Gordonia lasianthus [Loblolly Bay]

I. to England 1768 - possibly by Bartram

John Bartram to William Bartram July 1761, Wildman

I want seed and roots of ye lobloly Bay

John Bartram to Feter Collinson August 15, 1762

I have one loblolly bay that came over in hot dry weather that grows ye best of any

hot dry weather that grows ye best of any of ye Carolina evergreens . . . I am in hopes it will do well with me if ye hard frosts don't kill and disrobe it as ye other evergreens.

# Gymnocladus dioica [Guilandina]

Peter Collinson to John Bartram July 31, 1767, Darlington's Memorials

I dare say the Guilandina will be the Bonduc, that I and others have in our gardens. I conclude some Indian traders brought the nuts to Quebec from thence to France, and so the French believe it grows in Canada, but they will never tell where. I always believed it a southern tree, yet it endures our winters. How could my good friend John forget to send me some nuts, one at least? It would help to guess what it is . . .

Halesia caroliniana [H. Tetrantera - Halesia or Silver Bells]

I. to England 1756

Broadside Catalogue

<u>Hamamelis virginiana</u> [<u>Hamamelis</u> - Witch Hazel] I. to England 1736

Broadside Catalogue

John Bartram to Peter Collinson Fall 1741, Wildman Transcriptions

inquires if Witch Hazel seed sent in the previous year had germinated

Hypericum kalmianum [H. kalmianum - Shrub St. John's Wort] I. to England 1759, possibly by Bartram John Bartram to Peter Collinson October 16, 1757, Wildman

Transcriptions

it seems strange that thee never heard or saw our evergreen shrub St. John's wort and I sent thee full specimens of it and seeds many times and gave thee a very particular description of it with our evergreens. It grows generally 4 or 5 foot high in moist ground as thick as my wrist and spreads its top 2 foot diameter producing hundreds of pretty yellow flowers never saw it naturally in high or dry ground

<u>Ilex cassine [I. dahun</u> - Dahun Holly] I. to England 1726 Broadside Catalogue

<u>Ilex cassine var. angustifolia [I. angustifolia]</u>
Broadside Catalogue

<u>Ilex glabra</u> [<u>Prinos verticillata</u> - Inkberry or Evergreen Privet]

I. to England 1759

Broadside Catalogue
John Bartram to Peter Collinson January 6, 1763, Wildman
evergreen prinos [is] what I call evergreen
privet or ink berries in Jersey

Ilex opaca [I. aquifolium - Holley Tree]
I. to England 1744

Broadside Catalogue

John Bartram to Peter Collinson May 22, 1761, Wildman Tran-

scription

I sent him a fine parcel of holly berries ye getting of which had like to broke my bones. I fell on ye top of ye tree where ye top that I had hold of and ye branch that I stood on broke and I fell to ye ground my little son benjamin was not able to help me up my pain was grevious after very sick then in a wet sweat in a dark thicket no house near and a cold sharp wind and about 20 miles to ride home thee may judge what poor circumstance I was in and yet my arm is so weak that sometimes I can hardly pull on my cloaths yet I have a good mind to go next fall to Pittsburgh in hopes to find some curious plants

<u>Ilex verticillata [Prinos glabra - Winter Berry]</u>
I. to England 1736
Broadside Catalogue

Ilex vomitoria [I. yapon - Yapon or Caffena]

Broadside Catalogue
List of Plants sent from John Bartram with comments, Wildman
Transcriptions, p. 180

Yapon of Virginia or Cassena of Carolina

the Indians Drive a great trade with the Berries to make Tea with

Itea virginica [I. virginica]
I. to England 1774 - Bartram introduced it earlier
Broadside Catalogue
Peter Collinson to John Bartram July 20, 1759, Wildman Transcription
Collinson identifies plant sent by Bartram as Itea

Juglans cinerea [J. cinerea - Pignut Hickory]
C. in England since 1633
Broadside Catalogue

Juglans nigra [J. odorifera - Balsam Hickory]
C. in England since 1686
Broadside Catalogue

Juniperus virginiana [J. virginian - Red Cedar]
C. in England since 1664

Broadside Catalogue
Peter Collinson to John Bartram February 1, 1738, Wildman
Transcriptions

Lord Petre desires thee to procure a bushel of Red Cedar Berries which shall be paid for separately

<u>Kalmia angustifolia [K. angustifolia - Thyme Leav'd Kalmia]</u>
I. to England 1736
Broadside Catalogue

Kalmia hirsuta ? [K. ciliata - Dwarf Laurel of Florida] Broadside Catalogue

Kalmia latifolia [K. latifolia - Common Laurel, Ivy or Lesser Chamaedendron]

I. to England 1734
Broadside Catalogue

Peter Collinson to John Bartram May 29, 1739, Wildman Transcriptions

pray send 3 or 4 flowering plants of this leafe or what thou calls Ivy or Lesser

Chamaerodendron Let the box have only the Earth it grow in and no other that I may plant it on that Earth and then see what success I shall have for they dont like our soil tell me what sort of situation it grows in high or low wett or dry for of all plants it is my favorite So pray try and gett me good strong plants with sods to them.

Peter Collinson to John Bartram 174?, Wildman Transcriptions, p. 252

I think now my Dear John thou has amply Furnished Mee I have only want some good flowering plants of Ivy or Kalmia I have only one plant that stands it and I love more then one string to my Bow.

Peter Collinson to John Bartram June 12, 1761, Wildman Transcriptions

. . . The Ivy laurel or Broad Leaf'd Kalmia is now in flower certainly one of the finest ever green shrubs that is in the world The Staminas are elegantly disposed in the angles of the flowers and what a pretty blush its Bullated flower buds . . .

Peter Collinson to John Bartram June 12, 1761, Wildman Transcriptions

- . . prethee Friend John look out sharp for some more of those two fine plants for one can never have too many but they are so delicate in their nature of the many I have few can be tempted can be reconciled to our soil and climate if one out of 3 or 4 succeed it is well
- . . . I have a sprig in flower of the Kalmia in water and stares me in the face all the while I am writing Saying or it seems to say As you are so fond of me tell thy friend John Bartram who sent me to send more to keep me company for they will be well nursed and well treated

Kalmia polifolia [K. glauca - Dwarf Laurel]
I. to England 1767
Broadside Catalogue

Larix decidua [European Larix]

I. to America from Europe

John Bartram to Peter Collinson July 1754, Wildman Transcriptions

I have now two european larches has shot

out this spring near a foot

Peter Collinson to John Bartram September 22, 1760, Wildman Transcriptions

> I apprehend if the Larix Seed was Shaded with Green Boughs stuck thick on the South side of the bed it would screen them from the Scorching sun and Prevent them going off.

<u>Larix laricina [Pinos larix - Larch Tree]</u>
1. to England 1760

Broadside Catalogue

John Bartram to Dr. Mitchel June 5, 1744, Wildman Transcriptions

> Larch grows in ye swamp by the Hudson River . . . it sheds its leaves in autumn tho a fine resinous tree

<u>Laurus nobilis [L. nobilis - Red Bay]</u>
I. to America via England Broadside Catalogue

[Laurus geniculata - Carolina Spice Wood] Broadside Catalogue

Lindera benzoin [Laurus benzoin - Benjamin or Spice Wood] I. to England 1683 Broadside Catalogue

<u>Liquidambar styraciflua [L. styraciflua - Sweet Gum]</u>

1. before 1700

Broadside Catalogue Peter Collinson to John Bartram July 21, 1741, Wildman Transcriptions

the specimens of Sweet and Sour Gum I receved and prove to satisfaction but I want the Gum of each sort.

<u>Liriodendron tulipifera</u> [<u>Liriodendron</u> - Tulip Tree]

1. before 1688 Broadside Catalogue

<u>Lonicera canadensis [L. canadensis - Canady Honey Suckle Red and Yellow]</u> Broadside Catalogue

[Lonicera chamaecerassus - Dwarf Cherry]
Broadside Catalogue

<u>Lonicera sempervirens</u> [<u>L. periclimenum</u> - Virginia Scarlet Honeysuckle]
I. to England 1656
Broadside Catalogue

Lyonia lucida [Andromeda nitida - Carolina Red Bud] I. to England 1765
Broadside Catalogue

<u>Magnolia acuminata [M. acuminata - Cucumber Tree or Mountain Magnolia]</u>

I. 1736, probably by Bartram

Broadside Catalogue

John Bartram to Peter Collinson ? 1743, Wildman Transcriptions I found several curious plants, shrubs & trees . . . particularly a great mountain Magnolia 3 foot in diameter & a hundred foot high very straight and very fine wood specimens of which I hope to send by next ship . . .

Peter Collinson to John Bartram June 11, 1762, Wildman Transcriptions

I forgot in my last to tell thee my deciduous Mountain Magnolia I raised from seed about 20 years ago flower'd for the first time with Me and I presume the first of the species that ever flowered in England and the largest and tallest.

Magnolia fraseri Discovered by William Bartram in South Carolina in 1776

Magnolia grandiflora [M. grandiflora - Florida Laurel Tree]
I. to England 1734
Broadside Catalogue

Magnolia tripetala [M. umbrella - Umbrella Tree] I. 1752, probably by Bartram Broadside Catalogue

Peter Collinson to Colonel John Custis December 24, 1737, Wildman Transcriptions

pray direct him (Bartram) to the Umbrella Tree This plant or Tree will make him think his journey well worth coming

Peter Collinson to John Bartram June 11, 1762, Wildman Transcriptions

the great Laurel Magnolia & Umbrella both fine trees in my garden showed their flower Budds the first of June.

<u>Magnolia virginiana</u> [M. glauca - Rose Laurel or White Flowering Bay]

I. late in 17th century

Peter Collinson to John Bartram January 26, 1739, Wildman

Transcriptions

pray look out this year for seeds or ye small cones of ye Swamp Bay - its flowers are not unlike the Water Lily These seeds will not keep out of earth and must be sent before the rest.

Malus coronaria [Malus coronaria - Crab Apple]
T. to England 1724
Broadside Catalogue

Mitchella repens [M. repens - Creeping Syringa]

I. to England 1761

Broadside Catalogue

Morus nigra ? [M. nigra - Mulberry]

Broadside Catalogue

Peter Collinson to John Bartram February 13, 1753, Wildman

Transcriptions

I wish to see Specimens of Red, White & Black mulberrie As this fruit is very pulpy it may be gather'd a little before it is full ripe & putt it in a Phyal that I shall send in Liquor half-Rum and half spring water which will preserve them for we know little of them here

Myrica cerifera [M. caerifera - Candleberry]
T. to England 1699
Broadside Catalogue

Myrica gale [M. gale - Bog Gale]
T. to England 1750
Broadside Catalogue

Myrica pensylvanica [M. angustifolia - Dwarf Sweet Candle-berry], Broadside Catalogue

Nyssa aquatica [Nissa tupelo - Water Tupelo]
I. to England 1735
Broadside Catalogue

Nyssa ogeche [Nissa ogeche - Ogeche Lime] Broadside Catalogue Nyssa sylvatica [Nissa sylvatica - Sour Gum]
I. to England in 1750 probably by John Bartram
Broadside Catalogue

Peter Collinson to John Bartram July 21, 1741, Wildman Transcriptions

the specimens of sweet & sour gum I received and prove to satisfaction

Osmanthus americanus [Olea americana - Purple Berried Bay]
1. to England 1758
Broadside Catalogue

Ostrya virginiana [Carpinus ostrya - Horn Beam]
1. to England 1692
Broadside Catalogue

Oxydendron arboreum [Andromeda arboreum - Sorrel Tree of Great Andromeda]
I. to England 1752
Broadside Catalogue

Pyrus cv. Lady Petre [Lady Petre's Pear]
I. to America from England

John Bartram to Peter Collinson summer 1739, Wildman Transcriptions, p. 124

I thank Lady Petre for ye pear kernels & am often thinking what to send her for a requitall

John Bartram to Peter Collinson circa 1763, Wildman Transcriptions, p. 124

• • • ye pear raised from seed hath bore a number of ye finest relished fruits that I think a better is not in ye world & intend next spring to graft several of them perhaps it will make ye tree retain ye fruite better til they are full ripe which is its only defect • • •

Peter Collinson to John Bartram January 1, 1764
what I am persuaded will prevent its dropping of its fruit if some Quinces was planted
in the lower part of thy garden near the
spring and graft them with the Pear it
mellocates the fruit by long experience
all our Pears are on Quince stock and
succeed better then on Pear Stocks with us.

Philapelphus inodorus [Philadelphus]
Broadside Catalogue

Physocarpus opulifolius [Spirea opulifolia - Nine Bark] I. to England 1687
Broadside Catalogue

<u>Picea mariana [Pinus abies pini foliis brivibus</u> - Newfound-land Spruce, Black, Red and Dwarf]

<u>C. in England by 1700</u>

Broadside Catalogue

Pieris floribunda? [Spiked Andromeda]
John Bartram to Peter Collinson October 1754, Wildman Transcriptions
sent roots of "Spiked Andromeda"

<u>Pinus</u> <u>echinata</u> [P. <u>echinatus</u> - Pennsylvania Pine] I. to <u>England</u> 1739 <u>Broadside Catalogue</u>

Pinus palustris [P. palustris - Swamp Pine]
I. to England 1730
Broadside Catalogue

[Pinus pumila - Dwarf Pine] Broadside Catalogue

Pinus rigida [P. phoenix - Long Leaved Pine]

Pinus strobus [P. strobilus - Lord Weimoth's Pine, White Pine]

I. mid 16th century Broadside Catalogue

Peter Collinson to John Bartram Summer 1752, Wildman Transcriptions

I hope thee will meet with more of the White Pine for our people are Insatiable after them.

Pinus sylvestris [P. sylvestris - Pinaster, Scotch Pine]

T. to America from England

Broadside Catalogue

John Bartram to Philip Miller November 3, 1756, Wildman

Transcriptions

refers to "my scotch pine of 3 year ould"

Pinus taeda [P. toda - Franklinsense Pine]
I. 1741 to England
Broadside Catalogue

Platanus occidentalis [P. occidentalis - Buttonwood] I. to England 1636 Broadside Catalogue Populus deltiodes [P. deltoidea - Cotton Tree]
Broadside Catalogue

<u>Populus heterophylla? [P. folius cordatus - Black Poplar]</u>
1. 1772

Broadside Catalogue

<u>Populus tremuloides</u> [P. tremula - Aspen] Broadside Catalogue

Prunus americana [P. americana - Great Yellow Sweet Plumb]
I. to Europe 1768
Broadside Catalogue

<u>Prunus angustifolia</u> [<u>P. chicasaw</u> - Chickasaw Plumb] Broadside Catalogue

[Prunus declinatus - Dwarf Plumb] Broadside Catalogue

Prunus maritima [P. maritima - Beach or Sea-Side Plumb]

T. to England 1818, possible Bartram introduction

John Bartram to Peter Collinson August 20, 1753, Wildman

Transcriptions

'bur beech cherry" sent

[<u>Prunus missisippe</u> - Crimson Plumb] Broadside Catalogue

Prunus padus [P. padus sylvatica - Bird or Cluster Cherry]
I. from Europe
Broadside Catalogue

[<u>Prunus serratifolia</u> - Evergreen Bay of California] Broadside Catalogue

Prunus virginiana [Prunus racemosa - Dwarf Bird Cherry]
I. to England 1724
Broadside Catalogue

Prunus sp. [Plumbs, Apricots and Nectarines]
John Bartram to Peter Collinson December 1745, Wildman Transcriptions

as for ye plumbs apricots and nectarines thay do but poorly with us as I tould thee many times we have a mischievous beetle that bite or darts ye young ones then lays an egg which hatcheth and becomes a grub that eats ye fruit to live then ye fruit drops off before it is ripe

I planted a plumb tree some years ago in ye moist ground near a spring which hath blossomed and set abundance of fruits but thay was bit and all dropped off last spring I dug and cleaned all ye grass from about it but it signified nothing but I had three trees, one at ye south end of my house another at ye north and another on ye west where thay was daly trod about which bore perfect ripe plumbs as thick as they I have last spring could crowd together planted a nectarine tree on ye north end close to my kitchen door and I design to plant a apricot tree or two on a cold northern declivity by my stone quary where it is never heated with ye sun.

Peter Collinson to John Bartram April 26, 1746, Wildman

Transcriptions

To prevent the Depredations of the beetle I confess is not so easily remedyed as some other bad effects . . . Suppose as soon as this bettle is discovered it the Trees was to be smoak'd with burning straw under them or at some distance so as to fumigate their branches at a time the Beetles are most liable to attack the fruit or if the trees was to be squirtted on by a hand engine with water in which Tobacco leaves was soaked Either of these two methods I should think if they did not totally prevent yet at least would secure so much of these fine fruits as would be worth the labour of people of Circumstance who are curious to taste these delicious fruits of perfection

An englishman who settled in Italy also had a problem with the fruits of his apricots dropping. Philip Miller suggested that he Lay a great deal of mulch, rotten dung, and straw mixed of a great quantity of Fern leaves or any compost that would keep the ground moist and prevent the suns action which is very penetrating in that country as well as with you . . .

This was successful and since he practiced it, he has never failed of fruit in plenty in the greatest perfection . . .

If your apricots are too forward plant them under all disadvantages possible, that

is in the most exposed places and in the coldest, shadiest aspects that can be found . . .

Ptelea trifoliata [Ptelea - Trefoil Tree] I. to England 1724 Broadside Catalogue

Quercus alba [Q. alba - White Oak] I. to Europe 1724

Broadside Catalogue

Peter Collinson to John Bartram February 13, 1753, Wildman Transcriptions

> The difference between the Low Land White Oke and the Mountain White Oke is purely owing to their Situation and that cannot be determined but by Experiment take the acorns of each and plant in thy Garden A few years observation will putt that Matter out of doubt.

Quercus bicolor? [Q. dentata - Willow Oak with Broad Leaves] I. to England 1800 Broadside Catalogue

[Quercus campana] Broadside Catalogue

Quercus coccinea [Q. rubra] I. to England 1691 Broadside Catalogue

Quercus falcata [Q. hispanica - Spanish Oak] Broadside Catalogue

[Quercus flammula - Scarlet Oak of Florida]

[Quercus gallifera - Gall Bearing Oak]

Quercus ilicifolia [Q. nana] I. to England 1800 Broadside Catalogue

[Quercus lobata] Broadside Catalogue

Quercus marilandica [Q. folio amplissima - Barren Black Oak] I. to England 1739 Broadside Catalogue Bartram's Description of Native Trees, 1753, Wildman Transcriptions, p. 348.

Our barren oak called by Cattesby ye black oak tree allways grows with us on high barrens on a particular black soil is very scarce but in Jersey is more plenty

Quercus muhlenbergii [Q. castanea - Chestnut Oak] I. to England 1822 Broadside Catalogue

Quercus nigra [Q. deltoide - Water Oak] I. to England 1723 Broadside Catalogue

[Quercus palustris - Lesser White Oak] Broadside Catalogue

Quercus phellos [Q. phyllos - Willow Leaved Oak]

Quercus robor [English Oak]
Cutlers Manassah Cutler, p. 273
There is in this garden some very large trees that are exotic particularly an English Oak which he [William Bartram] assured me was the only one in America.

Quercus velutina [Q. nigra - Black Oak]

I. to England 1800

Broadside Catalogue

Bartram's Description of Native Trees, 1753, Wildman Transcriptions, p. 348

ye bark our tanners useth because they can't get enough of ye white or spanish for this stains ye leather of a yellowish green and it ye clothes of ye workers.

Quercus virginiana [Q. aegilops - Live Oak] I. to England 1739 Broadside Catalogue

[Rhamnus]
Feter Collinson to John Bartram January 20, 1751, Wildman Transcriptions

Did the berries of the Evergreen Rhamnus that was found in the great plains in the Desert growing 5 or 6 inches high amongst the Dwarf Pine come up in thy garden none did with me it was a rare and curious plant

Rhododendron carolinianum [Azalea caroliniana - Sweet Azalea |

I. to England 1815 Broadside Catalogue

Rhododendron maximum [R. maximum - Great Chamaerhododendron, Mountain Laurel]

I. to England 1736

Broadside Catalogue

Peter Collinson to John Bartram June 12, 1761, Wildman Transcriptions

But in a few days will the Glorious Great Chamaerhododendron appear with its charming clusters of flowers prethee Friend John look out sharp for some more . . .

Rhododendron roseum [Azalea rosea - Upright Honeysuckle]

I. to England 1812 Broadside Catalogue

Peter Collinson to John Bartram June 12, 1761, Wildman Transcriptions

the shrub honeysuckle or Azalea are almost as ticklish in their nature in some places they do well in others not at all So pray look out for more and if one box will not hold them send two.

Rhododendron viscosum [Azalea viscosa - Swamp Azalea]
I. 1734
Broadside Catalogue

Rhus aromatica [R. canadensis]
I. to England 1759
Broadside Catalogue

Rhus copallina [R. lentici folia - Beach or Seaside Sumac]

1. to England 1688

Broadside Catalogue

Rhus glabra [R. glabra - Scarlet Sumac]
1. 1620
Broadside Catalogue

Rhus radicans [R. radicans - Poison Vine] Broadside Catalogue

Rhus toxicodendron [R. triphyllon - Poison Oak] Broadside Catalogue

Rhus typhina [R. cervina - Buck's Horn Sumac] I. 1629
Broadside Catalogue

Rhus vernix [R. vernix - Poison Sumac] Broadside Catalogue

Ribes cynosbati [Grossularia canadensis - Prickley Goose-berry]

Broadside Catalogue

Peter Collinson to John Bartram April 26, 1746, Wildman

Transcriptions

I apprehend if your Gooseberries was Litter'd it would prevent their dropping off and If this litter was now and then watered . . . it would be of service

Robinia hispida [R. villosa - Peach Blossom Acacia]

Broadside Catalogue

Peter Collinson to John Bartram undated (1767), Wildman

Transcriptions, p. 668

I don't remember thy finding the Red Acacia It been loaded with flowers I am obliged to prop up the branches Is the Glory of our gardens and flowers twice a year I think [it is] one of the finest trees of america

Robinia pseudoacacia [R. pseudacacia - Sweet Flowering Locust]
I. 1601

Broadside Catalogue

Rubus idaeus [R. idaeus - Rasberry] Broadside Catalogue

Sambucus canadensis [Sambucus - Elder]
I. to England 1761
Broadside Catalogue

<u>Sassafras albidum [Laurus sasafras - Sasafras Tree]</u>
1. 1633

Broadside Catalogue John Fothergill to John Bartram November 22, 1743, Wildman Transcriptions

I am told that the Sassafras tree when in Bloom casts a most delightful fragrance around it Pray has ever any tryal been made to procure a distilled water from the flowers? I fancy they would afford a grateful and efficacious one unless the odoriferous parts are extremely fugitive indeed I think

if the experiment has not been made it would be worth while to have some gathered at the proper season and distilled, some with water alone, some with the addition of a third part Rum, molasses spirits or some other spirits if you have any clean and cheaper

Smilax herbacea [S. annua - Black Briony] Broadside Catalogue

Smilax rotundifolia [S. aspera - Bull Briar]
Broadside Catalogue

Sorbus americana [S. americana - American Mountain Ash]
1. to England 1782
Broadside Catalogue

Staphylea trifolia [S. trifoliata - Bladder Nut] Broadside Catalogue

Stewartia malacodendron [S. malachodendron]
I. to England 1742

Broadside Catalogue

John Bartram to John Clayton September 1744, Wildman Transcriptions

I am thankful for thy information about ye stewartia

<u>Symphoricarpos</u> <u>orbiculatus</u> [<u>Lonicera</u> <u>symphoricarpos</u> - Indian <u>Currants</u>]

I. to England 1730 Broadside Catalogue

Taxodium distichum [Cupressus disticha - Bald Cypress] I. to England 1640

The Horticulturist Magazine, 1855 Vol. X: p. 371

The great Cypress at Bartrams has been our admiration since boyhood; it stood, when we first remember it, near a fine spring, but it seems to have appropriated the whole to itself, the spring having disappeared; its long spreading roots send up those curious large knobs which the Southern negroes appropriate for bee-hives; altogether this specimen forms the noblest tree within our knowledge. Twenty feet in circumference is small, it is true, compared with the Wellingtonia with a diameter of 29 feet 2 inches, but

it affords the mind with some little opportunity to judge what the later to be.

Taxus canadensis [T. canadensis - Canada Yew]

I. 1800 - probably introduced earlier by Bartram

Broadside Catalogue

John Bartram to Peter Collinson 1740, Wildman Transcriptions,
p. 153

I've been a journey up to our mountains and brought down some yew which I hope may be different from your european ye door thinks it is a more lovely green then yours it groweth not above 6 foot high and where it lyeth upon ye ground it takes root so that one main root will cover several square yards of ground

John Bartram to Philip Miller February 18, 1759, Wildman Transcriptions

have you got our dwarf yew It is a shrub for low thick hedges I have one in my garden whose branches is nearly 5 foot diameter regularly about 4 foot high plain on ye top the never sheared

Thuja occidentalis [T. odorifera - Arbor Vitae]
1. 1534

Broadside Catalogue John Bartram to Peter Collinson May 27, 1743, Wildman Transcriptions

ye arbor vita which I gathered on Hudson's River I take to be ye same with that I gathered on James River

Thuja orientalis [China Arbor Vita]

I. to England from China 1690

John Bartram to Peter Collinson October 16, 1757, Wildman ye China arbor vita grows well but how they will fare next winter I cannot say

Tilia sp. [Tilia - Linden]
Broadside Catalogue

<u>Tsuga canadensis [Pinus abies virginiana - Hemlock Spruce]</u>
I. before 1730
Broadside Catalogue

Peter Collinson to John Bartram February 13, 1753, Wildman Transcriptions

Many are asking me why the name Hemlock is given to the smallest coned Fir which we call Yew Leafed Fir

Vaccinium arboreum [V. arboreum - Tree Wortleberry]
I. to England 1765
Broadside Catalogue

Vaccinium corymbosum [V. evonimifolium - Swamp Whortleberry]
I. to England 1765
Broadside Catalogue

Vaccinium macrocarpum [Cranberry]

I. to England 1760 possibly by John Bartram

Peter Collinson to John Bartram September 22, 1760, Wildman Transcriptions

Is it not possible to send me a lump of

Is it not possible to send me a lump of your cranberry roots tied up in Wett moss

[<u>Vaccinium nigrum - Whortleberry</u>] Broadside Catalogue

[<u>Vaccinium palustre</u> - Cranberry] Broadside Catalogue

[Vaccinium pavifolium]
Broadside Catalogue

[Vaccinium pendulum - Indian Gooseberry]
Broadside Catalogue

[<u>Vaccinium pusillum</u> - Whortleberry]
Broadside Catalogue

Vaccinium stamineum [V. racemosum]
Broadside Catalogue

Viburnum alnifolium [V. alnifolium]
I. 1820
Broadside Catalogue

<u>Viburnum dentatum [V. dentatum - Arrow Wood]</u>
1. to England 1736

Broadside Catalogue

Peter Collinson to John Bartram April 25, 1742, Wildman Transcriptions

the Arrow Wood was sent me by Doc Witt but under what name I cant now remember the last is a pretty flowering tree and the first that was in England

Viburnum lentago [V. tinifolia - Water Elder]

I. to England 1761

Broadside Catalogue

<u>Viburnum nudum var. angustifolium [V. lanceolata - Tough Viburnum]</u>

I. 1752

Broadside Catalogue
John Bartram to Peter Collinson August 20, 1753, Wildman
Transcriptions

Tough Viburnum [sent to Collinson]

<u>Viburnum orunifolia [Viburnum spinosum - Small Black Haw]</u>
<u>I. 1731</u>
<u>Broadside Catalogue</u>

<u>Viburnum rufidulum [V. prunifolium - Great Black Haw]</u>
1. 1883
Broadside Catalogue

<u>Viburnum trilobum [V. triloba - Mountain Viburnum]</u>
1. 1812
Broadside Catalogue

<u>Vitis aestivalis [V. vinifera - Bunch Grape]</u> Broadside Catalogue

<u>Vitis labrusca</u> [<u>V. labrusea</u> - Small Blue Grape] <u>I. 1656</u>

Broadside Catalogue

Parent of most American cultivated Grapes
Peter Collinson to John Bartram February 13, 1753, Wildman

Transcriptions

I am persuaded if cuttings skillfully taken from your wilde Vines, there is no doubt of their growing always take a cutting at a joynt with a knot or knub of the old wood to it in length 3 joynts and then bury the whole in the Ground only covering the upper bud with an inch of mould over it that it may easily strike through Let the place be shady and the ground well digged As I know your vines are long Joynted, they may be laid at a slant. This work may be done in the autumn but here wee think it better to make cuttings in the winter and tie them in Bundles and stick them half deep in shallow water and so let them lay until the mid of March or April and not one will miss that has a knot of 2 or more years wood at its end if curious knowing people was to search your country there is no doubt they would find Grapes of various excellencys & worth cultivating Carry some old White

or Red Cloth and tie to them that they might be easier found at a proper season to make layers or cuttings, for in seed there is no dependence not one in a hundred will come up to the Original.

<u>Vitis riparia</u> [<u>V. valpina</u> - Fox Grape - Red, Black & White] <u>I. 1656</u> Broadside Catalogue

<u>Wisteria frutescens [Glycine frutescens - Kidney Bean Tree]</u>
1. 1724
Broadside Catalogue

Yucca sp. [Yucca]
John Bartram to Alexander Catcot November 24, 1743, Wildman
I have sent the . . . one root of Yucca
I slipped one off my old roots in ye spring
and planted it for thee which I now send
Its flowers are 8 foot high with near a
hundred flowers on each stalk.

Zanthoxylum americanum [Xanthoxilum virginianum - Tooth Ach Tree |

I. to England 1740

Broadside Catalogue

John Bartram to Peter Collinson June 21, 1743, Wildman Transcriptions

We have had 2 exceedling mild winters insomuch that ye xanthoxilum which I brought from ye Capes of Chesapeake was not injured by ye frosts We have one sort growing by spots all ye way from Potomac to Hudson's River about 6 foot high but not so hot to ye last but warm enough to be troublesome when chawed

John Bartram to Philip Miller November 3, 1756, Wildman Transcriptions

but what induced me chiefly to search these swamps was a certain information that ye lesser or northern xanthoxilum growed plentifully about here where I hoped to find ye female kind that bore seed . . . for altho it grows between ye mountains of virginia, pensilvania in ye great vale and york government about Dr. Coldens yet I never saw any bear seed but a few bushes between Coldens and Goshen but in these swamps in east Jersey it grows 9 or 10 foot high as thick as my arm and full of red

berries or rather capsula for when ye capsula turns red ye seed is most of it cast out as I found to my disappointment that a hatful of red capsula would not afford half a spoonful of seed but when ye capsula is just turning from flesh color to red then gather them as thay spread prodigiously & send forth stems from ye roots at remote distances from ye mother stock I brought several of them home and planted which hath since shot out green leaves.

#### APPENDIX III

#### INTERPRETIVE NOTES

#### Bulbs

Peter Collinson to John Bartram, June 19, 1735, Wildman

Transcriptions

List of Bulbs sent by Collinson to Bartram Colchicums 2 Cyclamens

Squills

Male Peonys

Double Palewort

Gladeolus

Double White Saxifrage

Great Snow Drop Double Snow Drop

Ranunculas

Hyacinths

Tulips

Wood Anemones Fiery Red Lilies

Hyacinths of Peru

Variety of Offsets of

Peter Collinson to John Bartram, July 10, 1739, Wildman

Transcriptions

I have sent a few double tulips to ornament your garden & a few Seeds Some offsetts of best breeding Tulips which are Endowed with a wonderful faculty of Diversie (diversity) into a variety of Consult Miller in their culture. colors.

Peter Collinson to John Bartram, October 20, 1740, Wildman

Transcriptions

Inclosed is the Males Receipt for a Box of Bulbs Directed for thee Make much of them for they are Such a Collection as is Rarely to be Mett with all att once For all the Sorts of Bulbous Roots being taken up this year, there is Some of Every there is above 20 sorts of Crocus as many of Narcissus all our Sorts of Martigons & Lillies, with gladiolas Ornithagolums, mollys Iris - wth many others Time will show I don't now remember which It is likely Some Sorts thee may Have but I believe there is more that you So pray take care of these, give have not them good Soil & keep them clear from weeds - which are a great prejudice to these flowers in the Spring

John Bartram to Peter Collinson, May 1, 1763 for I have thousands of ye common sorts (of Bulbs) which may be sent alive to ye utmost parts of ye earth with onely nailing up in a dry box.

### Composting

Dr. J. Fothergill to John Bartram, May 1, 1769, Wildman Transcriptions

I think there is a shorter method and less expensive of making a natural soil for all your wild plants than is generally known. In the Autumn collect a large quantity of the new fallen leaves of all sorts of trees. Dig a hole in a vacant spot & fill it with layers of leaves and layers of earth dug out of the hole. Do this every fall of the leaves and a good compost will be formed in which all sorts of seeds and plants will flourish that are natives to the country. If the earth dug out of the hole is not sandy, this had better be thrown away and the hole filled with leaves & sand.

It will be proper that this should lye to rot two years before it is used. but by making such a preparation annually enough will be at hand for every purpose.

# Herbarium Specimens

Peter Collinson to John Bartram, January 24, 1735, Wildman Transcriptions

Plant then in flower with their Flowers on & with their seed Vessells fully Formed for by these Two Charisticks the Genus is known that they belong to Then take these & Spread them between the sheets of Brown paper Laying the Stems Straight & Leaves Smooth & Regular & when this is Done putt a Moderate Weight on a Board the Size of the Paper in Two Days Remove the Specimens into the Other Quire of Brown paper keeping the Weight on & then in a Week or Two being pretty well dried Convey them thence into the Quire of Whited Brown paper

Thus when now & then thee observes a Curious odd plant thee may treat it in this manner by which thee will convey a more Lively Idea then the best Description & when the gathers seeds Mark the Same Number on the seeds as thee Marks in the Sheet where thee Specimen is So once a year Returne Me the Quire of Whited Brown paper with the dried Specimens Tied Fast between Two Boards & then I will send When the Sheets some More in their Roome of paper will Hold it putt one Two or Three Specimens of the same plant on the Same sheet So they May Lay smooth by each other

Peter Collinson to John Bartram, January 24, 1735, Wildman

Transcriptions

Besides what I have further to propose by this Methode is thy own Improvement in the knowledge of plants for thou shall Send Mee another Quire of Duplicates of the Same Specimens. I will get them named by Our Most knowing Botanists & then Returne them again which will Improve thee More then Books for It is Impossible for any one author to give a General History of plants.

Peter Collinson to John Bartram, 1752?, Wildman Transcriptions

Had Specimens accompanied thy Curious account of your Okes, it had been worth printing but it is all a dead Letter without a view of the Real Subjects & that is the Case of the fine Specimen of Pine at the head (of)
Delaware No cone so is useless prethe Dear John for the future never send no accounts of any plant without a specimen I should be glad to see Specimens of those anonimous plants thou observed in the Beautiful plain of Egg Harbour

# John Bartram's Value to His Correspondents

Note in Peter Collinson's handwriting, p. 82 of Linnaean Society's Microfilm #629, American Philosophical Society
... my commerce with our Colonies is the Course of trade and my Love for plantings and improvement put me early in the scheme of procuring seeds as well for my own plant-

ing as Others but it was many years before I could do anything to any purpose until

luckyly - anno - 1733 - I was recommended to Bartram, a native of Pensilvania (sic)

John Bartram to Philip Miller, April 20, 1755, Wildman Transcriptions

I have an account that he [Linnaeus] hath published lately containing all our north american plants which Kalm observed when he was with us. I shewed him many that he said was a new genus & that Lineus must make many alterations when he was by him more truly informed of thair true characters as I should soon see when thay was printed I long to see these books to see if thay have done mee justice as Kalm promised me

Philip Miller to John Bartram, February 15, 1757, Wildman

Transcriptions

I received your letter dated the third of November last summer I have the disagreable account that neither of my letters wrote last summer have come to your hands; for which I am extremely sorry, because there were some queries therein which I should have been glad to be informed about; especially at this time, when I am revising the Gardener's Dictionary.

Philip Miller to John Bartram, January 12, 1758, Wildman

Transcriptions

the specimens you was so good as to send me by Capt. Lyon would have been a treasure had they arrived Safe but his Ship was taken by the French so those are all Lost which is a great misfortune at this time when they would have been a great service to me in ascertaining the names of some plants which remain doubtful: for though many of the plants of your country do begin to thrive here in several Gardens yet they are not some to the state of flowering or producing the fruit, for which reason fair specimens of them are of more value here and as my Hortus Siccus is now repleat with near ten thousand specimens, so I am very solicitous to make it as complete as I can

John Bartram to Philip Miller, February 18, 1759, Wildman

Transcriptions.

this winter I have very diligently persued thy figures and Gardeners dictionary believing them to be ye compleatest work of that kind extant but I find many of our country plants emitted by reason of not being fully aquainted with them which I hope in a few years to furnish thee with specimens or growing plants in order to compleat a useful . . . apendis

Peter Collinson to John Bartram, June 30, 1763

All Botanists will Joyn with Mee in thanking my Dear John for his unwearied Pains to Gratify every Inquisitive Genius.

John Bartram to Peter Collinson, September 23, 1764, Wildman

Transcriptions

several of my friends put me upon sending some of my new discovered specimens to ye King to try my success accordingly I have a little Box of such specimens as I am sure he never found & I believe never come to England before I sent them ye Box I sent to thy care with a letter to ye King under cover to thee which pray deliver to his majesty or if thee hath not freedom to do it pray deliver it to Dr. Pringle whom Benjamin Franklin promises to acquaint with ye whole affair

Peter Collinson to John Bartram, April 9, 1765, Wildman

Transcriptions

I have the pleasure to Inform my Good Friend that my Repeated Solicitations have not been in Vain for this Day I received Certain Intilligence from our Gracious King that He had appointed thee His Botanist with a Salary of Fifty pounds a year & in Pursuance thereoff I received the First half years payment of thy Salary Being twenty five pounds

Peter Collinson to John Bartram, February 17, 1767

I saw the Box of plants opened for the king they are in Good Order & a fine Collection as is Mine but there is some formality to Deliver the Kings Box which will go to Kew Gardens where all Vegetables are treated with the utmost Care & all that they can do to bring them to perfection in our climate the Kings specimens will be carefully delivered I thank thee for mine

# Plant Breeding

John Bartram to William Byrd of Virginia, 1739, Wildman Transcriptions

I have made several successful experiments, of the joining of several species of the same genus, whereby I have obtained curious mixed colors in flowers, never known before, but this requires an accurate observation and judgement, to know the precise time I hope by these practical observations to open a gate into a very large field of experimental knowledge, which, if judiciously improved, may be a considerable addition to the beauty of the florist's garden

# Plant Collection, Shipping and Introduction to Europe

Peter Collinson to John Bartram, January 20, 1734, Wildman Transcriptions

Dear friend I only mention these plants but I beg of thee not to neglect ye more material affairs to oblige mee A great many may be putt in a Box 20 Inches or two feet square and 15 or 16 high and a foot in Earth is enough this may be putt under the Capttns bed or sett in ye Cabin if it is sent in Octobr or Novembe Nail a few small narrow laths across it to keep the Catts from Scratching It . . .

I hope Thee had Mine per Cap. Davis with a box of Seeds in Sand & 2 parcells of Seeds per my good friend Isacc Norris Jr. Peter Collinson to John Bartram, June 19, 1735, Wildman

Transcriptions

I shall only observe when thee Sends another tub of plants that a foot deep in mould is enough for herbaceous plants & that thee make holes in the Bottome an inch in diameter & cover with Shells to dreine the Water — the Tub thee Sent was very Wett & if the plants had Lain Long or had had Much Wett would be Rotted for want of

larger Vents Peter Collinson to John Bartram, February 3, 1738, Wildman

Transcriptions

This accidently Brings to mind a very pretty methode by which plants will keep fresh 3 or 4 days on a Journey. Take 3 or 4 largest of bladders Cutt of the neck high and when a plant is found take it up with a Littel earth to the roots putt this into the Bladder Then put water into the bladder

to cover the roots then tie up the neck of the bladder Close round the stalk of the plant Leaving the leaves and flowers without Large plants won't do so well but several Small plants may be putt in a Blader Tied hang it to the pummel or Skirt of thy Saddle or any other Convenient Way thee may choose if the water waste these plants with Little add more trouble may be kept a Long While Fresh it is always best if water can be had to add it Immediately att taking up the plant

John Bartram to Peter Collinson, May 1738, Wildman Tran-

scriptions

In thy letter of December 20th thee supposes me to spend 5 or 6 weeks in colections for you and that ten pound will defray all my annual expences but I assure thee I spend more then twice that time and ye ten pound will not at a moderate expense defray my charges abroad beside my neglect of businis at home in falowing harvest & at seed time . . . yet I dont begrudge my labor but would do anything reasonable to serve you but by ye sequel of thy letter you are not sensible of ye 4th part of ye pains I take to oblige you.

Peter Collinson to John Bartram, April 12, 1739, Wildman

Transcriptions

Now Dear Frd John I come to thank thee for thy curious Collection of Living Plants for my self But Oh Sad Story for to tell not the Least Glimpse of one was to be Seen; if the unworthy Captain had sett the case only in his Cabbin all had been Safe it was Stowed in the Deck above the Hold and Covered all over with pipe Staves; but all this might have been tolerable if that Mischievous Vermin the Ratts had not fell on board it for so it was when I came to So behold Two nests get it out of the Ship of young Callow Ratts was kindled there and I take it what with their trampting, shiting & pissing Everything above the Ground was wholly Destroyed; and I am afraid by their pissing and dunging has Effected the Roots for only One appear'd to have life grieved mee to the heart, to see so many

Curious things and So much Labour & pains like to be destroyed by these nasty Creatures and the Neglect of the captain but for the future I must Desire thee to putt the Liveing things in a Less Case which takes up So much room that unless it is a Large Ship there is not room for it for all the Sodds of plants might have been packed in half the Roome which would save a great Deal of freight for the knows the Earth about them is only Intended to keep them Moist till they Come Here and then they are soon transplanted So that the Sods may be thrusts as Close as possible to one another of Earth below & Covered 2 inches may be sufficient to Convey them Heither. Make the Bottome full of Large Holes and rather to make Two Small Cases which are more manageable and more convenient to be Stowed then Such a Large One as this Last which I believe weighed 2 or 3 hundred Wate and as much as two men could carry

John Bartram to Peter Collinson, July 1739, Wildman
I have received thy kind letter by
Whright which was very acceptable as also

ye Cash which came in ye very nick of time when I wanted to pay ye morgage interest it was help in time of need & a demonstration of thy regard for my welfare & readiness to oblige me which lays me under an obligation to watch & improve all opertun-

ities wherein I can gratifie thee

John Bartram to J. S. Cressy, Fall 1741?, Wildman at present my Circumstances will not alow me time to raise any quantity of kitchen garden seeds. I am so often abroad upon long Journeys in making discoveries of animals & vegitables & fosils & insects to oblige my corespondents in England holand france & sweden so that my time is mostly spent this way in ye sommer season except in harvest time.

John Bartram to Peter Collinson, May 27, 1743, Wildman Tran-

scriptions

I am grateful to my good friend Sir Hans Sloan for his fine present of 5 guineus being he hath so generously bestowed it upon mee I desire thee would send me a silver can or cup as big & good as thee can get for that sum which I or mine may keep to entertain our friends withall in remembrance of my noble benefactor

John Bartram to Dr. Gronovious, December 15, 1746, Wildman

Transcriptions, p. 269

I have not traveled much abroad this year by reason of ye wars & troubles both in europe & our own back enhabitants french indians hath been very troublesome which hath made travail very dangerous beyond our inhabitants where I used to find many curiosities indeed these troublous times is a great hindrance to any curious enquiries

John Bartram to Peter Collinson, January 30, 1748, Wildman

Transcriptions

it was not safe going beyond ye mountains for fear of ye french indians Peter Collinson to John Bartram, March 3, 1747, Wildman Transcriptions

> Pray send no more of anything curious but keep all untill a Peace which I hope cannot be a great Way off for all Sides have spent their Money & when the Sinews of War are broke then all Parties must

John Bartram to Peter Collinson, January 3, 1748, Wildman

Transcriptions

it was not safe going beyond ye mountains for fear of ye french indians John Bartram to Peter Collinson, November 3, 1754, Wildman Transcriptions

> I have sent thee & gordon several evergreen & evergreen ramnas with one or two of our hairy mountain hazels well wraped up in your dear mossy conveyance pray let me know what success experiments we gain knowledge if moss will do as well as earth it is much I laid some moss in ye bottom lighter then I laid ye roots close & strewed some fine mould then I throwed some water on ye mould to settle it round ye small then I placed ye moss as close to roots as I could & about ye lower part of ye stems then sprinkled more water on ye moss then put more moss towards ye top

Peter Collinson to John Bartram, July 20, 1756, Wildman Transcriptions

> It gives Mee Pleasure to Hear my old Friend is well I hope He will not Expose himself to Indian Cruelties & yet I want a doz Boxes of Seeds

John Bartram to Peter Collinson, November 8, 1756, Wildman Transcriptions

. . . I have provided a fine cargo to send & is now ready to pack up against ye departure . . .

I thought to have sent thee 2 boxes of plants in earth but I could not persuade ye Captain to take them he is so full loaded with lumber

John Bartram to Peter Collinson, September 25, 1757, Wildman

I am glad that my cargo came safe to thy hands & was acceptable in some degree yet must recon myself in several cases unfortunate & in perticular in this that when I have endeavoured to give ye greatest satisfaction my labour has been ye least valued. Last year thee wrote to me to send thee a variety of seed of ye forrest trees shrubs & plants for to give to thy friends for that thay expected thee was able to supply with variety & accordingly to they earnest request I did what I could to oblige both thee & friends & freely sent a variety which come safe to thy hand; but when I read these lines in thy letter (what didst mean to send mee so large a box of seed it took much trouble & time to part it) this answer guite astonished me to think it trouble to part a few seeds sent ready to hand to ones intimate friends: I reflected upon myself what pains I had taken to collect these seeds in several hundred miles travail drying packing boxing & shiping & all to put my friends to trouble indeed my good friend if thee was not a widower I should be inclined to tel thee that even ould age advanced upon thee as fast as upon myself & perhaps these lines may given offence for as times go now we must not complain of neither private nor publick disappointments to ones perticular friends . . .

Journal of Trip to Virginia with Son William, October 13-28, 1757, Wildman Transcriptions

came before noon to Augusta court house or Stinton where ye people discouraged me from going any further along ye road toward Looneys ferry that ye Indians had murdered many white people about 30 mile distance in ye same vail so I turned to ye left toward ye South Mountain intending to take ye Pedlars gap . . . John Bartram to Son William, June 1761, Wildman Transcriptions

I am obliged for thy care in sending ye plants tho thay miscarried being washed overboard which if thay had not thay could not have survived ye improper time for sending them: ye onely time of sending roots is between September & April or May, well packed in earth & watered thin nailed up & placed in ye cabin or upper course of ye hold with lid uppermost as a box of merchandise.

John Bartram to William Bartram, September 1, 1761, New York Historical Society Film 547, American Philosophical Society,

Philadelphia

Cousin Billy tells me thee and Brother intends to go to Georgia this fall. So pray do so much to oblige thy father as to gather all the seeds thee can find in that journey or indeed anywhere—you certainly have a great variety that I want very much
. . never mind putting them separate; when they come up I shall know them—they are light carriage . . . save specimens of the rare sorts I should like them well of flowering shrubs I am always pleased with & evergreens above all

Peter Collinson to John Bartram, May 7, 1761, Wildman Tran-

scriptions

But look me out against next year some fine Azaleas & Calmias Tie up the roots with sodds or moss & Pack them up well in Moss in a Long Box I think Alexanders came so and they look as fresh & fine as if Just taken from their native place

John Bartram to William Bartram, September 1, 1761, New York Historical Society Film 547, American Philosophical Society

Library

Captain Gully seems to be a carefull, honest man, will come back to Philadelphia about the latter end of October which will be a good time to take up roots to send them. Thee knows how I send and pack up the shrubs and roots to London. Just so do mine and order them to be set uppermost in the hold. Those sent by him in the spring do finely and grows well and that will be a fine time and oppertunity to so all the seed thee can gather I hope a sensitive bryar will be one

John Bartram to Peter Collinson, November 1761, Wildman Transcriptions

my correspondents near London writes to me as freely for ye Carolina plants as if thay thought I could get them as easy as thay ye plants in ye European gardens that is to walk as leasure along ye alleys & dig what they pleased out of ye bed without ye danger of life or limb.

When I was in Newbern I searched ye ajacent woods with a doctor where I found plenty of ye sorrell trees or great andromeda I shewed him a plant I wanted sent he promised me roundly to do it without fail yet he never sent it tho not a half a mile to ye shipping: there is a man that lives up that river that frequent my house yearly who promised me to send a root in a box & to engage him to perform his promise I tould him I would fill ye same box back again with so much trouble I ye roots he wanted much have to get one root that will cost me 40 shillings & one in London wants a dozen of them & perhaps would think 40 pence too much to give for them.

John Bartram to Peter Collinson, 1762, Wildman Transcription, p. 572

but I had rather not send them any growing plants I can sell them here for twice what thay will care to give & have my mony directly without any risk or ensurance

Peter Collinson to John Bartram, March 11, 1763

Since that I have suffered much concern for the Carolina Capt Friend Kain being taken by the Spaniards & carried into Bilboa but as she was taken ll or 12 days after the Treaty was Signed she has been claimed & I hour this day she will be delivered I presume all our Seed Boxes are on Board but as is customary all letters were thrown over board So shall be at a great loss to find things

Peter Collinson to John Bartram, May 10, 1763, Wildman Transcriptions

My Last to thee was April 7th by Pacquet giving an account of the arrival of the Seeds after a Visit to Spain But for want of thy usual care and exactness or perhaps left to some careless person to pack up one of the Boxes had but eight Sorts of Seeds for

104 according to the Catalogue happily & luckily this fell into Gordons Hands Had it fell to any one Else I should have ashamed & confounded for my honour lay at Stake for I assured every one there was in the Boxes Seeds according to the Catalogue

John Bartram to Peter Collinson, August 8, 1763, Wildman

Transcriptions, p. 597

I have this week received my dear Peters letter of May ye packet which at first sight allmost made my heart leap for Joy but when I read but for want of care and exactness or perhaps left to some careless person to pack up one of ye boxes had but 8 sorts of seeds instead of 109 this knocked me down at once but considering this was not ye 1st or 2d or third time that I have been rashly censored & reproached when I have hazarded life & limb both my own & children using my utmost endeavour to oblige my correspondents I revived again surely you must think I am a careless fool When I know from long experience that ye least neglect will heap coals of fire upon my head but ye method I take its impossible to make such a mistake . . . but I cant watch them all along after until they come to your hands nor keep them from being rifeled neither on board ye ship nor after they are landed

Peter Collinson to John Bartram, January 1, 1764, Wildman

Transcriptions

It is with concern I hear of the Insurection at Pittsburgh in such an Hurry I don't wonder ye Curious things Suffered the loss of the alegator is most to be regretted if it is an allegator - which I much doubt, as these animals have never been found in such cold latitudes, but few in No Carolina & none ever heard off in Virginia

Peter Collinson to John Bartram, June 8, 1764, Wildman I dont know what to do with these Germans; some of the Boxes was open'd & plundered by the Spanish, one of Gordons I saw was so served so; possibly these might be so too.

John Bush to John Bartram, undated, 1764, Wildman, p. 672 the last years Boxes of Seeds proved not to expectation that in one of them were but Eight sorts of seeds in the whole Box ye other not above half full

my friends in Germany are not willing to pay me the full price for them but I am in Hopes I shall get payd for two Boxes for which I shall be accountable for as to this years boxs I have no complaints for which I shall make my payment good for them to Mr. Collinson.

Dr. Fothergil to John Bartram, May 1, 1769, Wildman
There will be a considerable demand for
American Seeds to various parts of Germany;
and were there any in town I know they might
be disposed of

## Plant Propagation

See <u>Chamaecyparis thyoides</u>, Appendix II

<u>Pyrus cv. Lady Petre</u>, Appendix II

<u>Vitis labrusca</u>, Appendix II

Peter Collinson to John Bartram, January 20, 1734, Wildman Transcriptions

I have put in the sand some vine cuttings and some of the great Neopolitan Medlar which wee always graft on White Thorn and so must you. As soon as these cuttings come to hand, soake them all over in water for 24 hours then plant the Vine the earth being well loosened as deep as only the uppermost of the cutting may be level with the earth. Water them in dry weather. These seldom fail growing the grafts after soaking may be laid in earth or in a moist place till grafted which should be

Peter Collinson to John Bartram, February 1, 1739, Wildman Transcriptions

I have a strong opinion that our Mistletoe may be propagated with you in a manner I have often try'd with success and then again yours may be with us. I have sent some berries in a box. My method is to choose the smoothest section of some branch of an apple tree & theron I bruize the Berry but not the seed by vertue of the Glutimous Matter about it it will Stick to the Bark . . . Its natural way of propagation is by a thrush that is

fond of the Berries and lives mostly on them while they last In dunging it is Squirted out on Branches of Trees where they happen to Sett It is surprizeing to think the Seed should preserve its Vegitative Quality through the heat of the intestines of the bird & the Glutinous part with It thus whereon It lights it Sticks Fast but such is the Order of providence and an Evidence of the Great Wisdome and power of the Creator to whom all things are possible.

Peter Collinson to John Bartram, January 20, 1734, Wildman

Transcriptions

I lay out a Bed 5 or 6 feet long and 3 foot Wide then pare off the Earth an Inch or Two Deep then I Loosen the bottome and Lay it very smooth again and thereon (if I may use the Term) I sow the Sand and Seed together as thin as I can then I Sift some good Earth over it about half an Inch thick This bed ought to be in Some place that it may not be Disturbed & keep'd very Clear of Weeds for several seeds come not up till ye second year

## Turtles

Peter Collinson to John Bartram, September 3, 1735, Wildman

Transcriptions

By any of the above captains please to send mee a Terapin or Two the Largest thee happens to Meet With when it is the proper Season if they are putt in a Large open half barrel with a little sand in the bottome & a few carrots or Turnip Roots to Live on I fancy they will come safe make holes in the bottome of the Barrel In case of Sea Water or Rain that it may drain off

Peter Collinson to John Bartram, December 20, 1737, Wildman

Transcriptions

I shall now tell thee something which very much pleases me & will Surprize thee the Box of Turtle Eggs (which was an Ingenous thought of thine to send) on the Day I brought it from the ship being the 20th October I took off the Lid having a mind to see the eggs & on peeping about I saw a little Head just above the ground and while I was Looking I saw the Ground move in a

place or two more In short in the space of 3 or 4 hours eight tortoises was hatched it was very worth observing how artfully they disengaged themselves from the Shells then with their fore feet scratched their Eyes open they have had many visitors, such a thing never happening I dare say in England before.

## Winter Hardiness

John Bartram to Peter Collinson, January 3, 1758, Wildman Transcriptions

Our meridian sunshine is so hot that it opens ye pores & sets ye sap in motion & when ye night approacheth ye frost is so intense that it congealeth & puts all in disorder & ye tender shrub perisheth so that these kind of tenderish plants that will endure your winter frosts must be planted in our eastern expositions. I design to see how our figs will bear such treatment for in a warm situation they are killed to ye root every winter . . .

John Bartram to Philip Miller, February 18, 1758, Wildman

Transcriptions

most of ye native plants of ye temporate zone loves to breath ye natural fresh air and in thair dormant season ye Juces will bear a Congelation like pismires(?) or ye worms in wood and thair organical vesails not be lacerated provided ye congelation comes on gradualy & ye fluidity is restored as gradually for I believe more forreight plants is destroyed by our suns heat than by our cold in common winters but most certain that our most intence frosts will congeal ye juices of some plants more then thay can bear in such case thay should have some light covering which should in moderate weather be a little raised to let in fresh air but not sun shine before hard frosts is past & then it should not in ye hottest time of ye day until ye buds begin to swell

John Bartram to Peter Collinson, May 1738, Wildman Transcriptions

I observed thy advice to preserve plants from being heaved out or distroyed by our

severe frost I have tryed this method several years but it doth not succed so well here as it may with you by reason of ye difference of our winters being sometimes very warm & when in a few houses most cold it is frequent in ye middle of our hard winters to have 2 or 3 days or a week of very warm weather which, if thay be covered will rot & if uncovered and warm when we go to bed a cold wind may rise before morning moreover moles & ground & freeze teribly mice will sport here

Peter Collinson to John Bartram, August 16, 1735, Wildman

Transcriptions

If frost has such an effect on the Vines which I could scarcely Believe in so south a Latituge to us you must do as they do in Germany When the Frost Settes in Dig Holes round the Vines & Lay the Last years shoots in & Cover them with earth to preserve from the Frost & att Spring take them up again & then Prune them for Bearing